MODEL HOUSES

FOR THE

INDUSTRIAL CLASSES

B. FLETCHER.

MODEL HOUSES.

'Work on till every workman should have three good rooms, well ventilated and with light before and behind. These were the requirements which were necessary for a Christian and a civilised being. But until they could arrive at that, let them be content with something more humble. Anything that would moderate those evils, however humble it might be; anything that would deal with the miserable, disgusting, alarming condition—alarming in a physical, moral, and spiritual sense, as well as in a political sense—of hundreds and thousands of people in this great and wealthy metropolis, should be welcomed and encouraged. They could to a certain extent moderate these evils, and at least they could show to the people who were now seething in suffering, sorrow, and indignation, that they were going forward, under God's blessing, to do their best, according to their means, to improve their spiritual, their physical, and their religious condition.'

LORD SHAFTESBURY, K.G., *Speech at Society of Arts, April* 21, 1871.

'The improvement of the homes of the people lies at the very foundation of political and social progress.' J. H. STALLARD, M.B. LOND., M.R.C.P.L.

'The laws of health are closely allied to the laws of morality: and that knowledge which tends to render the home comfortable, the body vigorous, and the mind clear, is highly valuable in preparing the way for spiritual instruction.'

T. TWINING, *Vice-President of Society of Arts.*

'A clean, fresh, and well-ordered house exercises over its inmates a moral, no less than a physical influence, and has a direct tendency to make the members of the family sober, peaceable, and considerate of the feelings and happiness of each other; nor is it difficult to trace a connexion between habitual feelings of this sort and the formation of habits of respect for property, for the laws in general, and even for those higher duties and obligations the observance of which no law can enforce.'

DR. SOUTHWOOD SMITH.

MODEL HOUSES

FOR THE

INDUSTRIAL CLASSES.

BEING

A REVIEW OF THE DEFECTS OF EXISTING MODEL LODGING-HOUSES, AND CONTAINING REGISTERED DESIGNS FOR MODEL HOUSES FROM WHICH BUILDINGS HAVE BEEN ERECTED BY THE AUTHOR:

TOGETHER WITH

REGISTERED PLANS FOR THE ADAPTATION OF EXISTING DWELLING-HOUSES FOR LETTING IN FLATS.

to which are added

MANY USEFUL HINTS TO INVESTORS IN SMALL HOUSE PROPERTY ON PURCHASING AND MANAGEMENT

AND

A GENERAL VIEW OF THE NECESSARY CLAUSES WHICH SHOULD BE CONTAINED IN A NEW ACT OF PARLIAMENT.

BY

BANISTER FLETCHER,

Associate of the Royal Institute of British Architects.

LONDON:

LONGMANS, GREEN, AND CO.

1871.

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PREFACE.

OFTEN the subject treated of trenches so much on ground already occupied, that the author commences by an apology and explanation why he considered it desirable to publish his book. In the present instance, the reverse is the case: my work, at least, is new.

I have written as simply, and in as condensed a form, as possible, so that, by the very smallness of my book, I might tempt all to read, and thus diffuse my ideas and plans; confidently believing that if generally used for all new buildings for the industrial classes, and for the adaptation of existing houses, they would convert the wretched homes of the working people of London and our large towns into really healthy dwellings.

I would only add that the buildings which have been erected from the designs given in this book, much please both those who occupy, and those who go to criticise.

B. FLETCHER.

24 BEDFORD SQUARE: *April*, 1871.

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MODEL HOUSES

FOR

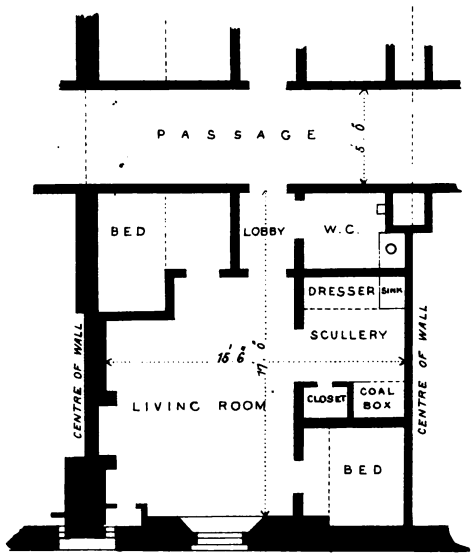
THE INDUSTRIAL CLASSES.

CHAPTER I.

REVIEW OF THE EXISTING HOMES OF THE INDUSTRIAL CLASSES AND THEIR DEFECTS.

It is clearly necessary, in putting before the reader a new design for an old purpose, to point out wherein the existing methods are found to fail. In doing this I would desire, as much as possible to avoid saying one word that might in any way annoy my professional brethren, or those gloriously benevolent people whose names alone would render this century and this country conspicuous in the annals of history for deeds of princely benevolence; but if I point out errors in the past it must be remembered I do so in the hope that it may lead to their avoidance in future buildings, and that they may not be perpetuated, as for example that objectionable feature of the external staircase has almost invariably been since 1851.

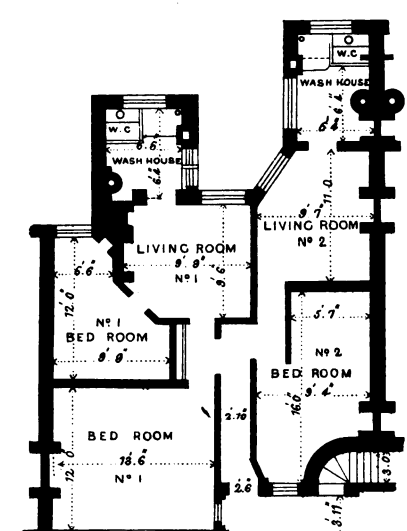
The first plan to which I would call attention is that which has made more sensation than perhaps any other: I allude to the Waterlow plan, of which I have given a plate. The first fault I venture to point out in this design is the narrow external staircase up which a piece of furniture of moderate size cannot be taken; thereby compelling the tenants to use a hoist at the back at great trouble and inconvenience. The next objection is the great loss of space in the passages. Again, a serious objection to this design is to be found in the shape of the rooms, which I venture to think no architect would defend, and therefore it is only necessary to explain to the lay reader that one great secret of good planning is to devise square or oblong rooms. They are cheaper to build, and give the best accommodation. A still greater objection is one which does not at first strike the eye so forcibly; it is that the living-rooms are (from the shape of the walls) dark and cheerless. The tenants say that the sun scarcely ever shines on their rooms even in summer, for more than a short time. My objections to these houses are confirmed by others. Take for instance the opinion of Mr. Paterson, a member of the council of a Working Man's Club and Mechanics' Institution, who says: 'Taking the plans of Mr. Alderman Waterlow's buildings, in the wings there was one square room well lighted' and that is a bedroom, 'but in the centre of the block the rooms were badly shaped, deficient in light, and a large space was occupied by passages.' I may remark I should not have spoken so fully about



LUMSDEN DWELLINGS, GLASGOW.

J. WYLSON. ARCH' 1848.

ROOMS 9 FEET HIGH. ENCLOSURES 7 FEET HIGH.



SIR SIDNEY WATERLOW'S
HEALTHY DWELLINGS FOR THE INDUSTRIAL CLASSES.
MARK STREET, FINSBURY.

M & N HANHART LITH

these buildings except from finding there is an impression abroad that these plans are perfect. I will next allude to the Lumsden dwellings, Glasgow, to show that these things are not better managed in Scotland. If the reader will kindly look at the plan (which is a copy of that supplied to the Transactions of the Royal Institute of British Architects, by Mr. Wyatt Papworth), he will see that the two bedrooms have no windows, and their only light appears to be derived from the difference in height of the partition and the ceilings, namely two feet, and the scullery and watercloset are also lighted and ventilated in the same way. The unhealthiness of such an arrangement is so apparent as to require no comment.

But enough of this unpleasant task of criticising separate plans; the rest of the chapter I shall devote to the more general defects of the existing town model lodging-houses, at least of those with which I am acquainted, and I may mention I have paid a special visit to Mr. Twining's Economic Museum at Twickenham, to see if he had plans of any I had not seen. I did not succeed in finding any but those with which I was already familiar, but I spent a pleasant afternoon in his interesting collection, which is well worth a visit, as the 'Builder' pointed out a short time since.*

The first considerable fault is the great unpleasantness arising from the use of the external staircase. The objection of not being able to get into the street

* Since writing the above, I regret to have to record the fact of the destruction by fire of this Museum.

or leave any one set of rooms without passing neighbours and strangers shoulder to shoulder is very great, especially to women, as it deprives their actions of that privacy which the English so much covet. To this, in wet weather, or when the stairs are washed, is added the unpleasantness which must attend the descent of stairs by females. The external staircase also necessitates the external landing, whence a close view is too often obtained into some of the rooms of each occupant. The external landing or balcony also darkens the rooms. Another objection to the existing model lodging-houses is the absence of freedom. Mr. Spencer Bell says, speaking on this subject: 'They (the English lower classes) had a decided objection to those large and formally-conducted establishments where, as they considered, they were constantly under a supervision which was irksome to them.' Mr. T. Chatfeild Clarke also stated that what the poor require is 'a comfortable house, not in a block of buildings. There was a certain amount of prejudice against these immense blocks of buildings; a great one on the part of respectable parents against the promiscuous mixing together of large numbers of children during their playhours, by which they sometimes become contaminated; being beyond the parental influence and control. He believed the poor preferred to live in smaller classes of houses.'

Let me next quote the opinion of the Secretary to the 'Operatives' Building Company' (from the sessional papers of the Royal Institute of British Architects of

the year 1866). After speaking of the great attention he had given the subject, he says: 'He would ask those present to examine the plans of the buildings of these associations' (alluding to the Metropolitan Association for Improving the Dwellings of the Industrial Classes, the Labourers' Friend Society, under the presidency of Earl Shaftesbury, and the Marylebone Association), 'not of any selected portions, but of the whole buildings, and he thought they would see that very often much space was lost, and they might in most cases have been erected cheaper, and yet have been quite as substantial, healthful, and comfortable, had every advantage been taken to make a good commercial dividend.' Again, take the opinion of Rev. Richard Burgess, B.D.; he says: 'He repeated that the poor, for whom they wished to provide dwellings, were, as a rule, averse to living in those immense modern, or model edifices.' I would conclude with the speech of Professor Kerr, which I think will conclusively show that whatever may be thought of my propositions for meeting this question (one of the most important that can engage the attention of architects and the public), at least the existing plans are condemned. The Professor says: 'With regard to the first question, namely, what I call the "dogmatic" model (and I use the term "dogmatic," of course, in its merely scientific sense, as referring to something to be accepted without special argument), I may say that for 25 or 30 years the improvement of the dwellings of the labouring classes has gone steadily forward in one direction, and

only one; and it is not to be wondered at if it proves to be the fact, that in going on so long in one direction the excellent promoters of the scheme have overreached their purpose. This is by no means an unusual thing, and the question is whether a crisis in the course of this enterprise has not now arrived? I think it has; and so apparently do gentlemen of great intelligence who have spoken to-night. It is remarkable that the dogmatic plan has not been defended by any one of the speakers. It is not maintained in its integrity by any gentleman present. Therefore I must express my astonishment when I find the chief of our professional organs not only supporting it in its entirety, but paying me the great compliment of saying, that if the present opposition had not been brought forward by myself, it would not have considered it necessary to do more than dismiss it with a dozen lines of disapproval. I think it is to be regretted when we find sentimentality so far misleading an important and honoured organ of public opinion. But it is not to be wondered at either, for when one has been accustomed with unimpeachable motives to run in a particular groove for a quarter of a century, the convictions of habitual thought are not easily to be shaken.'

I do not think I need weary the reader with any more opinions to show that the great efforts which have been made to provide dwellings for the industrial classes have not succeeded,* and it is notorious, I may

* Professor Kerr says: 'Take all the model lodging-houses throughout London, erected within the last five-and-twenty years, and they are only

say, that the existing houses they live in are ill adapted for the purpose, are not conducive to health, comfort, or cleanliness. It will therefore be quite unnecessary to quote any high authorities to confirm this, and I will at once proceed to consider the plans of new buildings I have erected, ending this chapter with the remark made by Mr. Edward Hall, F.S.A.: 'He felt more than ever that the matter of planning was at the root of the question, and not only planning as to the houses themselves of the metropolis, but also as to the streets and other lines of communication;' and desiring the reader, as he follows my propositions, to bear in mind, as I have tried to do, the maxim contained in the Report of the Special Committee to the Society of Arts (April 1864): 'It is of course essential to the success of undertakings for the improvement of the homes of the people, that they should be appreciated and patronised by those for whose benefit they are intended.'

a mere drop in the bucket, compared with the ordinary progress of population.' I remember reading a short time since, that the increase of population averaged 70,000 a year in London, and it required 7,000 additional houses to be built annually to meet the increased demand from this cause.

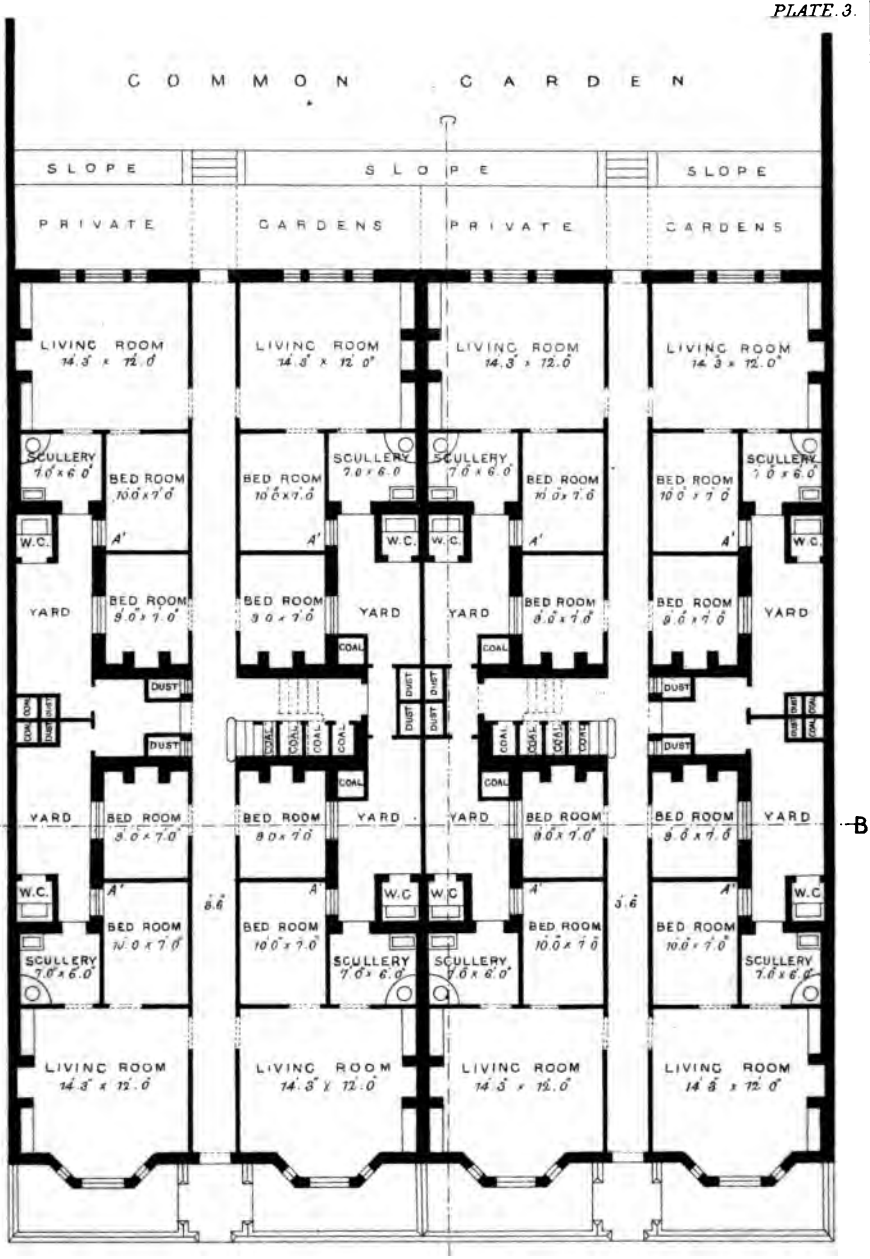
CHAPTER II.

EXPLANATORY OF THE DESIGNS REGISTERED UNDER THE TITLE 'B. FLETCHER'S MODEL DWELLINGS FOR THE INDUSTRIAL CLASSES'—FOUR DIFFERENT PLANS AND ELEVATIONS GIVEN, AND COMPARISON MADE BETWEEN THEM AND OTHER EXISTING HOUSES.

On the sound old principle that ere you condemn a thing you should be able to suggest a better, let us now proceed to consider the houses which have been recently erected at Pentonville (see Plates No. 1, 3, 4, and 5), from the designs and under the superintendence of the Author. These houses have answered extremely well, no difficulty having been experienced in letting every set of apartments on remunerative terms, a result attributable, the Author cannot but believe, in great measure to the presence of advantages not possessed by any previously erected 'model dwellings,' but even more to the absence of the *disadvantages* alluded to in the last chapter as being so prominent in the 'Waterlow' and other similar erections.

In the first place, there is nothing in the external appearance of these houses to call attention to the fact that the same building is occupied in common by more than one family. No huge ungainly mass of brickwork, in appearance something between a barrack and a workhouse, as in the case of the building in Platt

PLATE. 3.



PLAN OF GROUND FLOOR.

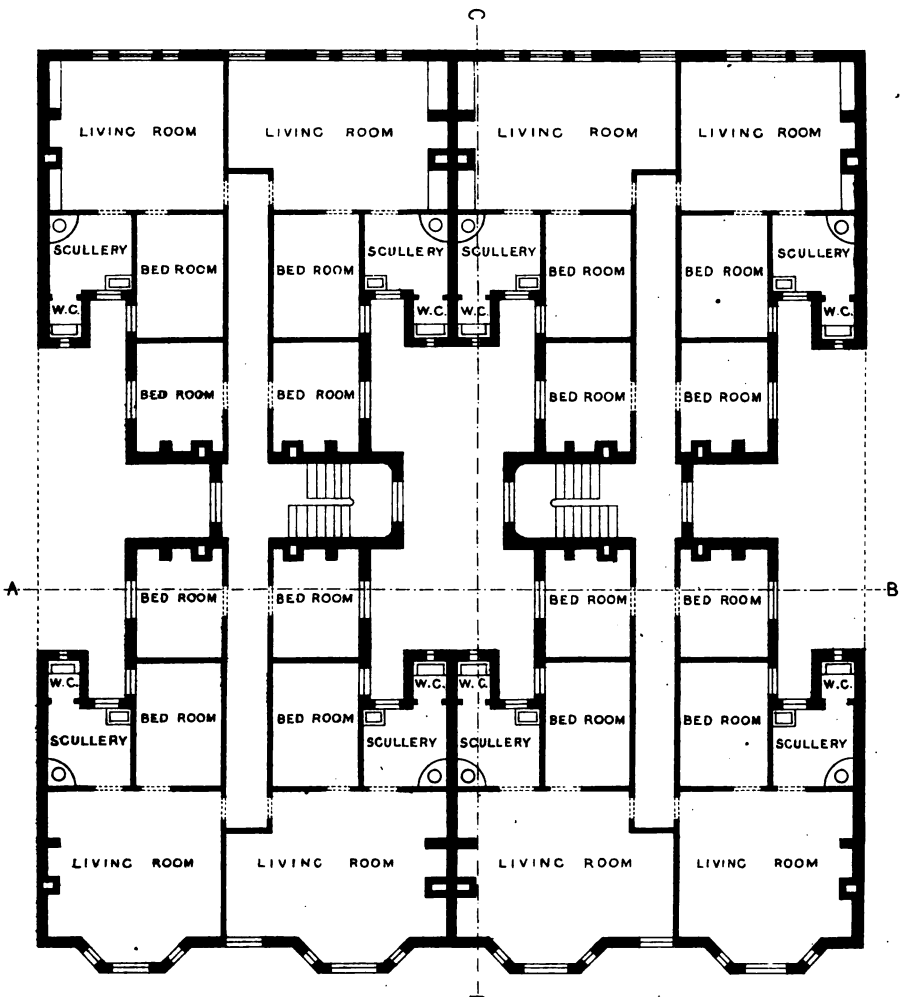
B. FLETCHER'S MODEL DWELLINGS FOR THE INDUSTRIAL CLASSES.

REGISTERED 16 MARCH 1871.

SCALE, 16 FEET TO ONE INCH

NOTE. THESE HOUSES MAY BE CONSTRUCTED WITH A DOOR COMMUNICATING BETWEEN THE BED ROOMS CLOSE TO WINDOW AS SHEWN AT A'

M & N HANHART



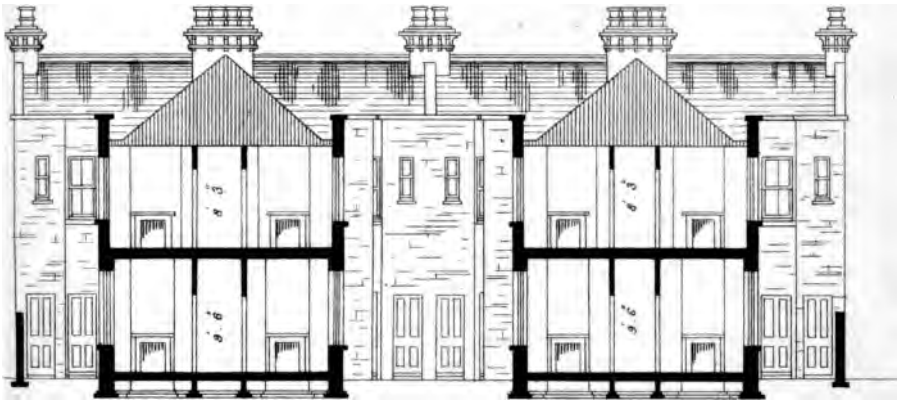
PLAN OF FIRST FLOOR

B. FLETCHERS MODEL DWELLINGS FOR THE INDUSTRIAL CLASSES.

REGISTERED 16 MARCH 1871.

SCALE 16 FEET TO ONE INCH

M&N HANNART LITH



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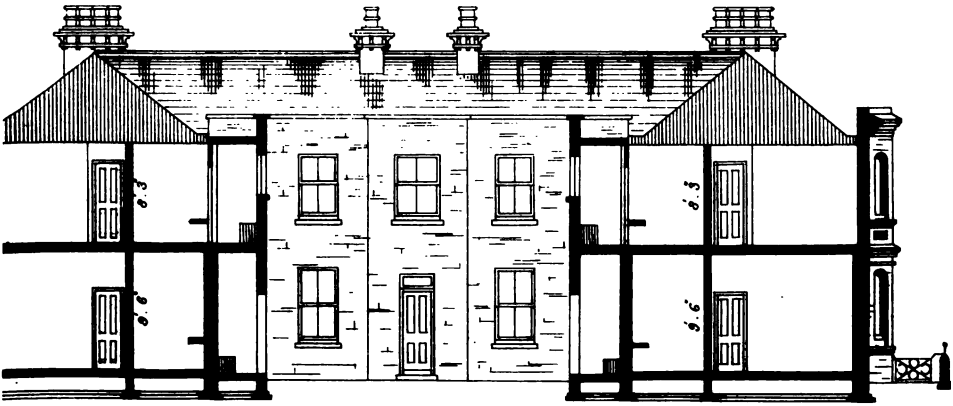


SECTION ON LINE C.D.

B FLETCHER'S MODEL DWELLINGS FOR THE INDUSTRIAL CLASSES.

REGISTERED 16TH MARCH. 1871.

SCALE 16 FEET TO ONE INCH.

M & N HANHART LITH

Street, Camden Town, rears its obtrusive and unsightly bulk above the surrounding houses. No ugly and inconvenient external staircase stamps the building at once as one of those 'model lodging-houses,' against which there exists an almost ineradicable prejudice in the minds of those for whom they are intended, for the respectable poor of London are not without pride, and many a father of a family prefers, from a prejudice, foolish no doubt, but which still must be considered in dealing with these questions, to crowd himself and his belongings into a couple of miserable rooms, wholly unadapted for the requirements of several persons, rather than avail himself of the conveniences of one set of apartments expressly designed, with which, however, would have to be incurred, what he considers, the *odium* of living in a 'model lodging-house,' and the objections pointed out in the preceding chapter. Here we find merely, as regards external appearance, a quiet, unpretending building of brick two storeys high, with cement dressings, and arranged in what is called the 'cottage' style, i.e., the door in the centre and a room on each side. Nothing, save the unusual depth of the structure, which might be noticed by a critical observer, reveals aught at variance with the idea that the house is the residence of some respectable member of the 'lower middle' class of society, which effect is further supported by a low dwarf wall in front with stone coping, surmounted by a simple iron bar and standards. Entering, we find that a passage running the whole length from front to back, and, at

the back, leading out into a nice piece of garden ground, secures a thorough ventilation throughout the entire floor, and gives access to *four* sets of apartments only. From the centre and to the right of this central passage rises the staircase, spacious, well lit, and so contrived as to present no awkward angles or corners, and landing in another central passage, which, running exactly over the one on the ground storey, in like manner contains the entrances to four more sets of apartments. Thus the whole number of different families using the one entrance door of each building is but eight, presenting a striking contrast to the hive-like arrangement of some existing and much-praised edifices, where a single entrance supplies ingress and egress to endless ramifications of passages and corridors crowded with the doors of separate domiciles.

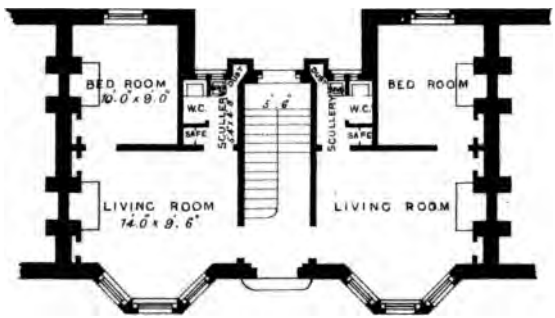
Each set of apartments in the building now under description consists of four rooms, viz., living-room, scullery, and two bed-rooms; the scullery and one bed-room opening out of the living-room, while the other is so situated that, while convenient access is obtained to it from the common passage should it be desired to let this one room separately to a so-called single man lodger, a door can readily be made opening from one bedroom into the other, should it be required for occupation by members of the same family. A sink and copper conveniently placed in the scullery, with the water laid on, supply every requisite for cleanliness, while separate waterclosets, coalbox, and dustbin are provided for each set, in convenient positions, easily to

be identified by a glance at the plan. The coalboxes for the four sets on the first floor are obtained under the stairs, a separate key being of course provided for each.

In the internal finishings of these houses, though a proper economy has prevented the introduction of any expensive and unnecessary embellishments, care has been taken to provide, both in appearance and in fact, all the comfort and convenience of an ordinary English home. In this spirit it has been thought wise to adhere to the usual system of plastering and papering the walls, rather than to favour the proposals of some to colour merely the bare brickwork of the walls, with the view of preventing the harbouring of vermin, or to line the walls with glazed tiles or bricks, with the same view, and for the greater facility of cleaning. One great point to be considered in these dwellings is that they should present to the occupant all the appearance and sense of comfort and—to coin an expressive word —'homishness' of the rooms to which he has been accustomed, and to ensure this end the old familiar plaster and paper are surely best adapted. The colouring on the brickwork has a poverty-stricken aspect wholly at variance with all idea of comfort in a living-room or bedroom, while the glazed walls are equally open to objection on the score of 'chilliness,' and though they may possess a slight advantage from a sanitary point of view, it would take a long time to educate the mass of the industrial classes to forego their sense of home comfort for any such consideration.

Enough has now been said to illustrate my views as to the best method of avoiding, in buildings specially erected for the purpose, the errors pointed out in the preceding chapter as existing in the structures hitherto erected, and to explain the reasons which induced me, after much careful thought and study, to adopt certain forms and expedients in the houses erected by me, so as to make them in every sense 'model dwellings,' and to come up to the standard recommended by Lord Shaftesbury, quoted on the title-page; and following his Lordship's view that until every workman can have such homes we are to be content with something more humble, I proceed now to explain my two-roomed houses. The first we will consider is Plate 6. Here I have endeavoured to put the *conveniences* into the smallest compass, and give a large sitting-room with bay window. Parenthetically, I may remark, I much like bay windows, and strongly recommend their adoption, unless the question of economy is paramount, as they are cheerful and light, and I have seen the occupants put in them a small table at which they work; so that meals may be taken at the larger table in the centre of the room, and their work not be disturbed. In this plan we have all that can be required where the tenancy is small and one bedroom only is required, with an exceedingly light staircase having a current of air from back to front. The size of the rooms is as follows: living-room 14 feet by 9 feet 6 inches, exclusive of bay windows; bedroom 10 feet by 9 feet, scullery and W. C. 5 feet by 4 feet 9 inches. They have

ELEVATION.



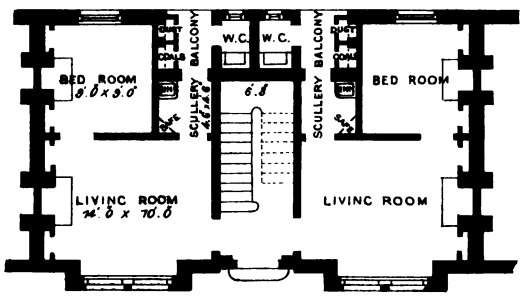
PLAN OF ONE FLOOR.

REGISTERED. JUNE 5TH. 1871.

SCALE 16 FEET TO ONE INCH.

M & N HANHART.

ELEVATION.

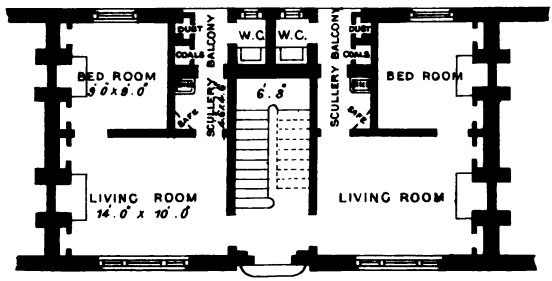


PLAN OF ONE FLOOR.

REGISTERED JUNE 3RD 1871.

SCALE 16 FEET TO ONE INCH

ELEVATION.



PLAN OF ONE FLOOR

REGISTERED JUNE 5TH 1871.

SCALE. 16 FEET TO ONE INCH.

M & N HANNA

thorough ventilation, and if it be desired a third storey could be added and a fourth and fifth, in fact any number of storeys, but I must repeat I am opposed to lofty buildings for these reasons:—

1. Too many families are congregated together, which renders the spread of disease easy, and necessitates the having fixed rules to limit the freedom of the tenantry.

2. The many-storeyed building overshadows the street and keeps away from its surface the sun's health-giving rays.

3. The dislike of many stairs, which induces people to remain at home and not take proper exercise.

4. That as the builders of these enormous blocks of buildings do not widen the streets or increase the yards *where* they pull down existing property, you have about four times the number of families to use the same thoroughfare, and the same or diminished space in yards.

As an example of how true these objections are, take Streatham-Street model houses, Bloomsbury, and compare the height of that block with the surrounding property. Again, as to back-yard space: they have 70 feet by 30 feet; this may seem large, but divide it by 54, the number of families it is built to accommodate, and the smallness of the space is evident. The back yards of ordinary houses give more, even where let out in floors. The next plans I have designed are with an open balcony in rear of the scullery (see Plates 7 and 8). Take Plate 8 first: we have a plain front without projecting windows, the doorway being slightly recessed

to break the line of frontage. The elevations are neat, having little ornamentation; the living-room windows are Venetian, so as to admit plenty of light and be cheerful; passing through the scullery, which contains meatsafe and sink, we reach the open balcony; thence the watercloset, dustshafts, and coalcellar. The roof of the balcony of ground floor is formed by the balcony of first floor, the first floor balcony being covered by the main roof of house.

Plate 7 I have prepared to show how the same plan might be adapted to houses having a forecourt, or where economy was more necessary; as we avoid the building of parapet walls and resort to eaves gutters, we omit the slightly ornamental Venetian windows in living-rooms and instead put two ordinary windows, with common axed arches.

The size of the rooms I append:—

	ft.	in.		ft.	in.	
Living-room . . .	14	0	×	10	0	(Exclusive of bay windows.)
Bedroom . . .	9	0	×	9	0	
Scullery	4	6	×	4	6	
Balcony and W.C. . .	7	0	×	5	0	

A reference to the plates will show that the staircases are well lighted and ventilated.

The foregoing three plans are designed to be built where the ground does not give sufficient depth to erect my first described model building. They are, including the external walls, under twenty-two feet deep. One other point I should allude to, is the back yards, or back gardens. I could get income therefrom

by letting them in portions to the ground-floor tenants to erect small workshops on.

A fifth design (Plate 13), the reader will find described in Chapter VIII., and although it is there shown as adapting three existing houses into two, I think the plan well worth attention for new buildings, and that it has many merits to recommend its adoption.

We pass now to the consideration of another, and perhaps more universally interesting phase of the question, viz., the adaptation of *existing* houses to the purpose of 'model dwellings,' i.e., buildings which can be let out in different sets of apartments, each set having, complete in itself, all the appurtenances and conveniences of an ordinary dwelling-house.

CHAPTER III.

DEFECTS OF ORDINARY HOUSES FOR LETTING OUT IN APARTMENTS OR FLATS—OBJECTIONS POINTED OUT.

THAT the adaptation of existing houses is the only way to deal largely and effectually with the question, I think all will admit, but let me, for fear some may disagree, quote that high authority on this subject, Lord Shaftesbury, who says, speaking of *adaptation* of *existing buildings*: 'Really and truly, this was the only way in which they would be able to provide for the great mass of the population of London.' He had been speaking of the adaptation of Tyndall's buildings, in these words: 'That place had now, by adaptation, become decent and healthy. The rents were regularly paid, and the occupants were enabled to have a tenement of three rooms, at a much less figure than would be given in other places for a home in only one room. They were enabled to do that, because they had not spent a large sum of money—not having had to build from the ground. He felt satisfied *that* was the only way in which they would be able to meet the present evil, and they could do that with a small sum of money.'

Again, take the opinion of Mr. Espinasse, who remarks: 'Some years ago he looked into the financial details of some of these societies, and he found that it

was impossible for any of them to realise a profit. *When efforts were made to adapt and improve old houses, it was possible to make both ends meet, but not otherwise.*'

Let me also quote Rev. Richard Burgess, B.D.: 'He believed they would find that the building of immense edifices for the occupation of the poor, would not be so effective as taking houses already located, and turning them into habitable places for the poor.'

Again, if more confirmation be required, listen to Professor Kerr: 'I am constrained to say that I believe it would be the best possible course to adopt for the improvement of the dwellings of the common working classes, to build new tenements throughout the suburbs of London, and *alter old ones* more centrally situate, on some single-room principle, literally by the thousand.'

Probably, then, no more interesting enquiry can be prosecuted than this: How can we adapt the many thousands of houses in London and other large towns, to the altered requirements of the day? We find almost everywhere masses of houses, originally built for the purposes of one family—either from fashion having flitted from the locality or the speculative builders having only one form of plan which they have never varied, except making the rooms smaller or larger, according to the frontage—I say we find these houses let out in floors, to various tenants; and so well has Professor Kerr described the present occupation of such houses, that I feel I cannot do better than quote his words. He says: 'You find these houses let out in floors. They consist

ordinarily of three floors, ground, first, and second floors, with sometimes attics, and sometimes kitchens, which I need not here take into account; and each floor consists of the well-known two rooms, the front room being about fifteen feet by twelve feet, and the back room the same size *minus* the width of the staircase, or about nine feet by twelve or thirteen feet. The ground-floor front room is curtailed by the width of the entrance passage, and on that level there is a back door behind the stairs. Each floor is occupied by a separate family; the back yard, with its water supply, waste grating, watercloset, and dustbin, being common to all occupants. On each floor, the front room is the sitting or living room, and the back room is the bedroom. If the family consists of a married couple, with either no children or only very young ones, the children may be accommodated for sleeping on a small separate bedstead in the back room with the parents; or otherwise, there may be in the sitting-room a press or sofa bedstead, for their accommodation. Indeed, even when this is not necessary for the accommodation of children, it is very often found that people of this class, who are living as they consider comfortably, keep up the sofa bedstead in the sitting-room for the occasional accommodation of a guest.' Again, take the opinion of the Secretary to the Operatives' House Building Company, who says: 'If they took the cases mentioned of the better artisan class living in houses of six or eight rooms, they would find that those houses were invariably built for the accommodation of one

family. The houses now occupied by artisans in apartments in dense neighbourhoods, were all so built originally, and were formerly actually occupied by single families of a rather higher social grade, while those now being built in the environs of London, were built as though they were intended to be occupied by one family. That the ordinary houses were, for the most part, very unsuited for the occupation of several families might be inferred from a general consideration of their plan. Those houses consisted of basement, ground, first, second, and third floors—sometimes. The basement was generally the only portion fitted with the proper means for cooking; the parlours were small rooms, usually fitted with dwarf cupboards and small grates, adapted only for sitting-rooms; the first floor partook more or less of the drawing-room character, with, perhaps, marble chimney-pieces; and the floor above, built and fitted as bedrooms, were even more unsuited to the proper performance of the domestic duties of a family. The inconveniences in this respect increased the higher they went up. Such was the ordinary accommodation of well-to-do artisans. There were no conveniences for getting clean water upstairs, and removing dirty water to downstairs —*a task which usually fell to the artisan himself, when he returned home from his day's work;*—and on one day of the week, certainly for the greater part of the year, he had to submit to the inconvenience of a vapour bath, from wet linen hung in the room to dry. Such was the ordinary state of life of the artisan class. The

conveniences for cooking were extremely limited, and when they considered how necessary it was to a man's health that his food should be wholesomely cooked, and his means economised as much as possible, they must feel the importance of providing proper accommodation. He did not think those people ought to be called Quixotic who attempted to give the artisan class places to live in where their wives could perform the multifarious offices of domestic life without so much labour as they usually entailed.'

These then are the existing homes of many, many thousands of the industrial classes, and it must be remembered that such homes are perpetually built wherever builders can find vacant ground, thus continuing the ONE plan they have, with all its objections.

Amongst the objections that most prominently strike one, are the following :—

1. The inconvenience of fetching water from a distance.

2. The inconvenience of removing waste or dirty water.

3. The distance to the watercloset, and its use by different families.

4. The inconvenience in removal of cinders, &c., to the dustbin.

5. The absence of any convenience for washing up plates, dishes, &c., thereby compelling the use of the living-room for that purpose, and so preventing that room being kept dry and tidy.

6. The absence of coal receptacles in close proximity.

7. The great labour and time expended in the present mode of getting and getting rid of water, 'washing up,' fetching coals, and removal of dust and cinders.

I think all will admit that where cleanliness necessitates a great amount of labour among the working classes, dirtiness and untidyness are found to exist, and that therefore the first essential to be sought in altering their existing dwellings is to give them 'to their hand,' as they would express it, all those appliances which will lessen that labour. I am certainly afraid that if the middle or upper classes had to struggle against all the inconveniences I have enumerated, they would also succumb to dirt and untidyness. But whether this be so or not, one thing is certain, which is this, that to give the working classes every convenience is a great step towards the elevation of the masses.

In the two chapters that follow, I propose to explain how existing houses might be altered so as to meet all the objections I have mentioned. Then I shall devote a chapter to the very important question of cost.

I will now conclude the present chapter, as I feel that my readers, both lay and professional, will agree with me fully to this extent—*that the case is proven as to the present houses, and that it would be one of the greatest boons to civilisation and to the improvement of the enormous masses of town working men and their families if some plan could be devised to alter existing houses, this being the only way to deal quickly and effectually with so vast a question.*

CHAPTER IV.

EXPLANATORY OF TWO DESIGNS REGISTERED UNDER THE TITLE 'B. FLETCHER'S MODEL PLAN FOR ADAPTATION OF DWELLING-HOUSES FOR LETTING IN FLATS.'

HAVING now expounded the view that the conversion of existing houses to the purpose of 'model dwellings,' is a scheme which may in many cases present advantages superior to that of the erection of an entirely new building specially for the purpose, as where owners of house property may desire to benefit the poorer classes without incurring any very considerable outlay, and at the same time obtain a good rate of interest on the capital invested, I may proceed to the development of my ideas as to the means by which these ends may be best arrived at. For this purpose I have had taken the plans of a house situated in a street leading out of the Hampstead Road, which may be accepted as a fair type of a very common class of house property in London, and have devised such alterations as, with the least outlay, appear necessary to render each floor suitable for letting as a separate set of apartments, comprising in itself all the conveniences of a dwelling-house of the poorer class. These alterations I hope. by the following explanations, and with the aid

B. FLETCHER'S MODEL PLANS FOR ADAPTATION OF EXISTING DWELLING HOUSES FOR LETTING IN FLATS. DESIGN **A**. REGISTERED. 22 MARCH. 1871.

SCALE. 16 FEET TO ONE INCH.

ALTERATIONS SHEWN IN RED.

of the accompanying plates (see Plates 9 and 10) to make clear to even the most non-professional of my readers.

Take we then in the first place the design I have distinguished as 'A,' which is one for obtaining on each floor, without adding any buildings to the existing structure externally, a living-room and one bedroom, with scullery, W.C., sink, coalbox, and meatsafe. This is effected on the first and second storeys by the simple expedient of carrying through to the front wall the partition dividing the back room from the staircase, and devoting the part thus cut off from the front room to the purposes of a scullery, in which are conveniently arranged a W.C. (which has external ventilation by taking in a part of one of the front windows), a sink, and a coalbox with meatsafe over. The shorter piece of partition dividing the front and back rooms thus cut off, being set back to the position indicated by the red tint on the Plate, gives space for a separate door into the living-room from the landing, and the existing door in the part of partition so set back will now afford access from the landing into the scullery, while a new door is provided for ready communication between the living-room and scullery. A dustbin might be provided by enclosing the space under the sink if thought desirable, but I would recommend in this design that the occupants of each floor should use the existing dustbin in yard in common. The ground storey would need no alteration; the front living-room remaining as at present, and the back room being devoted to the purposes of a bedroom.

The present wash-house, reached from the yard, will do duty as the scullery of this set of apartments, containing also the coalbox and meatsafe, and the W.C. will remain as at present, save that its use will be reserved to the occupants of the ground floor.

The design shows also the adaptation, as a separate dwelling, of the basement floor. To those, for many there will doubtless be, who will blame the notion of appropriating to the purposes of living and bedrooms any portion of a storey situated even partially underground, I reply that experience proves that, however objectionable, it is a thing that *will inevitably be done* so long as there continue to be numerous poor who are compelled to live near their work, and so long as owners of houses continue to be determined to make the most out of their property. So that rather than adopt a course which cannot affect the evil, by leaving the basement storey *in statu quo*, to be inhabited by some poor people in all its pristine inconvenience and unhealthiness, I prefer to endeavour to point out the means by which these drawbacks may be to some extent alleviated. By the introduction, then, of a new door in the wall dividing the front and back rooms, one of the first *desiderata* of healthfulness, a 'through' ventilation, is obtained. The construction of a partition enclosing a part of the front area under the entrance landing affords ample space for a W.C. and small scullery containing a sink. One of the coal-cellars will thus be utilised for its original purpose, while a convenient meatsafe is reached from the lobby, which, together

with a large closet, is obtained by the introduction of two partitions across the passage.

The small section on line 'A B' shows the means by which light and external ventilation are obtained for the scullery under entrance landing. The flat roof of W.C. being kept at a lower level than the landing, will allow of the introduction between them of an upright sash or fanlight, which, being hung on centres, will provide abundant light and air for this small space.

Having thus thoroughly explained the alterations involved in 'Design A,' which alterations will be seen to be of the most trivial character as compared with the result achieved, we may turn to the consideration of 'Design B,' which is one devised to afford the same accommodation as regards number of rooms as the last, but without lessening the size of the present front rooms, the sculleries in each case being externally added, and certain other advantages gained which will be more fully seen in the course of this description.

This scheme, then, comprises the addition at the back of the house, of a building three storeys high containing sculleries and W.C.s for the ground, first, and second floors respectively. These additions are in every case reached by new doors to be made in the back wall of the house, on the landing or quarter-space of the stairs between the floor to which the particular scullery appertains and the floor below. Passing into the additions thus provided for the first and second storeys, the scullery is found to be well lit, and provided with a sink and coalbox, with meatsafe over. A door nearly

opposite the one opening from the stairs, leads into the W.C., thoroughly well ventilated, and in which also is an opening into a dustshaft taken down into the bin below, which effectually obviates the necessity of travelling up and down stairs.

This explanation applies equally to the ground storey, except that, as will be seen by reference to the plates, a trifling alteration is made in the arrangement to admit of a door, common to all, opening into the back yard (which it is contemplated in each of the four designs should be used as a common 'drying-ground'), and an extra safe or closet is obtained in the lobby, arranged for this purpose. The existing back door would, of course, be re-used in the new position. A railing or grating would have to be provided to the area to window of back room on basement to prevent accidents to children, arising from the proximity of the back door. The present wash-house it is proposed to utilise as a wash-house common to all, the space being enlarged by the removal of the W.C., and another copper being provided in addition to the one already existing.

The basement being altered in a manner precisely similar to that proposed by the last design, needs no further explanation.

The staircase windows being removed to make way for the new doors opening into the additions, some other means of lighting the stairs must, of course, be provided. This it is proposed to do by inserting glass panels in the new doors, whereby a large amount of light will be borrowed from the sculleries; and further,

BASEMENT. GROUND PLAN. FIRST FLOOR. SECOND FLOOR.

B. FLETCHER'S MODEL PLANS FOR ADAPTATION OF EXISTING DWELLING HOUSES FOR LETTING IN FLATS. DESIGN B. REGISTERED 22 MARCH 1871.

SCALE 16 FEET TO ONE INCH.

ALTERATIONS SHEWN IN RED

as the roof of the topmost storey of the addition will be considerably below the level of the ceiling of the present second floor, there will be ample space for the introduction of a large window, from which also, particularly supposing the staircase to be of the 'well' formation, a large quantity of light would be obtained.

In 'A' and 'B,' therefore, we have two designs, each of which gives, at a very moderate cost, four distinct sets of apartments (in a house of four storeys), each containing, compactly arranged, all the conveniences necessary to render them comfortable dwellings for persons in humble circumstances, and who do not require more than one bedroom.

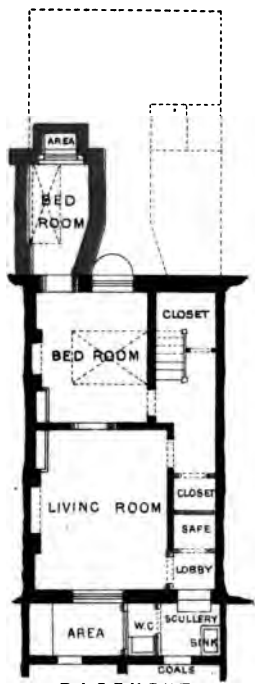
I propose to devote the next chapter to the consideration of designs giving greater accommodation.

CHAPTER V.

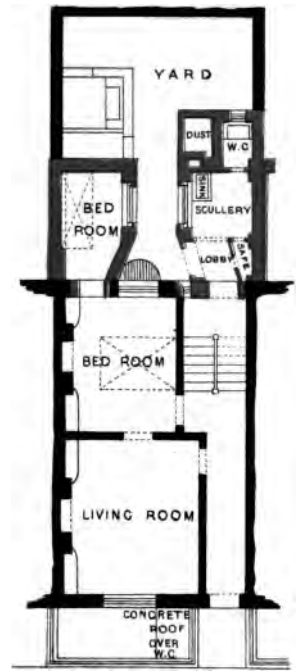
EXPLANATORY OF TWO MORE DESIGNS REGISTERED UNDER THE TITLE 'B. FLETCHER'S MODEL PLAN FOR ADAPTATION OF DWELLING-HOUSES FOR LETTING IN FLATS.'

It is well known to what a terrible extent the dwellings of our poorer classes are, in many cases, overcrowded. Not only among the very poor, the almost destitute, where whole families, and even several families, herd together in one miserable room, to the destruction of health, decency, and morality, but even (though of course to a lesser extent) amongst those of a rather better class, where, from motives of the rigid economy which it is nevertheless still necessary for them to practise, a single living-room and bedroom are made to serve for a much larger number of individuals than it is desirable they should accommodate. It is therefore to show how the extra accommodation required for such cases may be obtained in the simplest manner, that the author now invites the reader's attention to designs 'C' and 'D.'

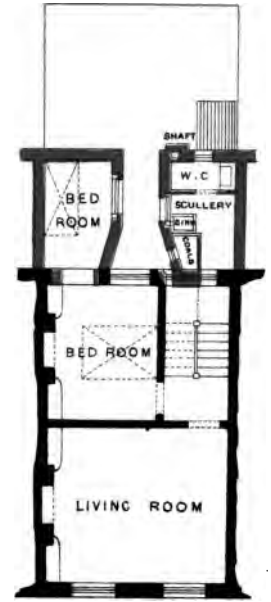
The idea still followed out is that of adapting an existing building to the required purposes, and the plans taken for adaptation are the same as in the last two designs. Indeed, in Design 'C' (Plate 11) we find for consideration a scheme which gives on each



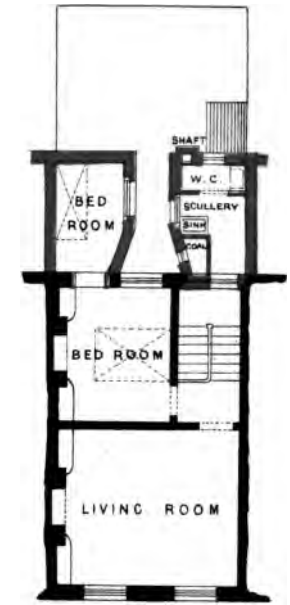
BASEMENT.



GROUND PLAN.



FIRST FLOOR.



SECOND FLOOR.

B. FLETCHER'S MODEL PLAN FOR ADAPTATION OF DWELLING HOUSES FOR LETTING IN FLATS. DESIGN C. REGISTERED 22 MARCH 1871.

SCALE. 16 FEET TO ONE INCH

ALTERATIONS SHEWN IN RED

floor all the accommodation contained in Design 'B,' obtained in the same way, but with the addition of an extra bedroom, this room being obtained by building out at the back of the house another addition, containing as many storeys as the house itself, and cutting doorways in the back wall by the side of the existing windows, and opening out of the present bedrooms. A really commodious, and at the same time compact, dwelling is thus obtained for a family in humble circumstances, by a simple alteration involving but a moderate outlay.

This design includes also a scheme for more perfect lighting, which would be especially valuable, assuming the staircase to be of the description known as 'dog-legged,' the existing windows being removed, as in the last design, to make way for the doors opening into the scullery additions. By constructing a portion of the wall of this addition at an angle, sufficient space is obtained between it and the partition dividing the stairs from the existing back room, to allow of a window being introduced, thus directly admitting amply sufficient light for the staircase, while at the same time providing thorough ventilation.

The arrangement of the scullery, W.C., &c., is similar to that described in the last design, and the sink, dustbin, meatsafe, and coalbox are provided in the same manner. By removal of a portion of the present outbuilding of wash-house a desirable augmentation of the space to be used as a common drying-ground is obtained.

In design 'D' (Plate 12) I give a scheme giving precisely the same accommodation as the last, viz., living-room and two bedrooms, with scullery and appurtenances as before described, but showing a different method of lighting the staircase. Here there is no splay to any portion of the scullery wall, which is carried straight up to the existing back wall of the house, but is arched over for a width of about three feet from the face of the back wall to afford light to windows inserted in the back wall of the staircase, and occupying half its width, the other half being devoted to the doors leading into the sculleries. A splayed piece of partitioning, covered externally with zinc, passes diagonally from the division between the door and the window to the opposite side of the arched opening, and affords an excellent situation for the coal-box and meatsafe, enabling the latter to be thoroughly ventilated into the external air.

BASEMENT. GROUND FLOOR. FIRST FLOOR. SECOND FLOOR.

B. FLETCHER'S MODEL PLAN FOR ADAPTATION OF DWELLING HOUSES FOR LETTING IN FLATS. DESIGN D. REGISTERED 22 MARCH. 1871.

SCALE 16 FEET TO ONE INCH.

ALTERATIONS SHEWN IN RED.

CHAPTER VI.

SPECIFICATIONS FOR THE ADAPTATIONS DESCRIBED IN CHAPTERS IV. AND V.

In order to show more clearly the extent of the alterations required in carrying out the adaptations referred to in the preceding chapters, I think it well here to append my detail specification upon which the contracts are founded, and which are referred to in Chapter VII.

DESIGN 'A.'

Specification of Works *required to be done in certain alterations to according to the drawings prepared by and under the superintendence of* Mr. B. Fletcher, A.I.B.A., *Architect and Surveyor, 24 Bedford Square, W.C.*

Basement Floor.

New Doorways.—In the position indicated on the plan, cut out for and form the three new doorways, one from front room into back room, and the other two opening from front room into the lobby and closet respectively. Put proper lintels over these openings, 4 inches thick and 9 inches longer than width of opening, and line same and jambs with proper rebated jamb linings, which are, together with the doors hung to same and the architrave mouldings (if any), to be of similar description to those of existing doorways on this floor, and to have similar hinges, locks and furniture.

The two upper panels of present door from passage to area are to be removed and ground glass substituted.

Partitions.—Form the closet shown in passage by constructing across same two 2½-inch quarter partitions. Lath, plaster, and twice colour same, or otherwise finish to accord with the adjoining work.

W.C.—Form the w.c. where shown in area with a $2\frac{1}{2}$-inch quarter partition covered externally with zinc properly fixed and soldered, and internally lathed, plastered, and coloured. Form in this partition a $1\frac{1}{4}$-inch casement light, properly hung to $\frac{3}{4}$-inch rebated linings with rounded nosing and architrave, bead and button fastening. Divide the w.c. from the scullery with a $1\frac{1}{2}$-inch square framed partition with door hung in same with proper closet latch and bolt. Fit up the w.c. with proper $1\frac{1}{4}$-inch deal seat, riser, and hinged flap, white earthenware pan, D trap and apparatus, and proper water supply from cistern over complete; 5-inch soil pipe properly connected with drain.

Provide a floor in w.c. of $1\frac{1}{4}$-inch yellow flooring on joists 3 inches by 2 inches.

Render, float, set, and colour the parts of brickwork forming walls of w.c.

Roof of W.C.—The roof of the w.c. is to be kept down in the manner shown in the small section on design 'C,' so as to admit of an upright sash being introduced between roof and the underside of the stone entrance landing, to light and ventilate the scullery. The roof of w.c. is to be flat, or with just sufficient fall to throw off the water, and is to be formed with joists $3\frac{1}{2}$ inches by $2\frac{1}{2}$ inches with $\frac{3}{4}$-inch rough boarding to receive a layer of concrete. The upright sash is to be $1\frac{1}{2}$-inch, glazed with ground or obscured glass, and hung on centres to proper rebated frame. Provide and fix lines, &c., for convenient opening and fastening of same.

Cistern.—Provide and fix over seat of w.c., the full width of closet, 1 foot 6 inches wide and 1 foot 6 inches deep, $1\frac{1}{2}$-inch deal cistern properly ploughed, tongued, dovetailed and strapped, and lined with 6-lb. milled lead. Lay on the water to same with $\frac{3}{4}$-inch supply-pipe and proper ballcock and ball and waste.

Scullery and Sink.—Colour the brick walls of scullery.

Provide and fix where shown in scullery, on proper supports, a sink of galvanised iron. Provide with proper bell-trap and grate, connected with drain by a 3-inch zinc wastepipe. Lay on water from cistern in roof with $\frac{3}{4}$-inch service-pipe and brass bibcock.

Dustcloset.—Enclose under sink with $1\frac{1}{4}$-inch square framing wrought on one side only, to form dustcloset. Hang a door to same with proper knob and button fastening. Provide two boards to keep the dust in, sliding in perpendicular rebated fillets fixed on each side of the interior of the door.

Meatsafe.—Form where shown in angle of lobby a meatsafe, at a height of 3 feet 6 inches from ground and on proper bearers, of 1¼-inch square framing, with door hung, the panel of which is to be filled in with perforated zinc. Black japanned knob and button fastening. Fit up with two 1-inch deal shelves, on proper bearers.

Ground Floor.

Sink.—In present wash-house, provide and fix a sink of the size and where shown, and of similar description and fittings to that described on basement.

Coalbox and Meatsafe.—In angle of wash-house, where shown, form an enclosure, with 1¼-inch square framing, divided into two compartments in its height. The lower one, 3 feet 6 inches high, is to be for a coalbox; and the upper one fitted with two 1-inch deal shelves, on proper bearers, for a meatsafe. Each division to have a 1¼-inch square framed door hung, the upper one to have the panel filled in with perforated zinc. Black japanned knobs, and button fastenings. Provide the coalbox with two sliding boards to keep the coals in, similar to those described for dustcloset.

First and Second Floors.

Work to be taken down.—Take down that part of the partition, with doors in same, dividing the front rooms from the staircase, and re-use in the new positions indicated on plans, to divide the sculleries from the landings, relathing and plastering on both sides, and papering or otherwise finishing to accord with adjoining work.

Partitions.—The new partitions, to divide the living-rooms from sculleries, are to be 3-inch quarter partitions, lathed, plastered, and papered, or otherwise finished, to accord with adjoining work, on each side, and with the two doorways constructed in each, as shown.

Doors.—The new doors, furniture, architraves, and jamb linings, are all to be similar to those to present doorways on these floors.

Coalboxes and Meatsafes.—Construct of the sizes and where shown on the plans, and otherwise in manner precisely similar to that described for ground floor.

W.C.—Enclose, where shown on plans, portions of the sculleries,

with 1½-inch square framing, to form W.C.s, with proper 4-panel square door hung, and fitted with proper closet latch and bolt. These W.C.s to be fitted with seats, pans, apparatus, and cisterns similar to those described to W.C. on basement.

Sinks.—Provide in each scullery, of the size and where shown, and on proper supports, a sink similar to those described for basement and ground storey, and with similar appurtenances.

Dustcloset.—Enclose under each sink to form dustcloset, as described in basement.

Generally to House.

All making good, of old work up to new, is to be properly performed, and all damage done to existing work, by reason of these alterations, whether of carpentry, plastering, papering, painting, or otherwise, is to be properly repaired, and all works to be left clean and complete at the conclusion.

Cisterns.—Remove the present cistern in front area, and refix in roof, over new scullery on second floor, hanging up the cistern to roof timbers with iron straps, or otherwise securely fixing in new position, supplying all necessary bearers and supports.

Provide also, adjacent to the last named, or in such other position as may be most convenient, a new cistern, of similar description and capacity, to be fixed in the same secure manner.

Trim the ceiling for, and provide a trap door, for access to these cisterns, properly hung to 1-inch rounded and rebated linings.

Provide also a short ladder for access to trap door.

Lay on the water to these cisterns, with 1-inch lead supply-pipe from main, with proper ballcocks, utilising the one in present cistern; 1-inch standing wastes.

Painting.—Properly knot, prime, prepare, and paint, all new work usually painted, in four coats of good lead and oil colour, finishing in all cases so as to accord with the old work adjoining.

Glazing.—Glaze all new lights not specified to be ground or obscured, with seconds Newcastle.

DESIGN 'B.'

(DESIGNS 'C' AND 'D' APPENDED.)

SPECIFICATION OF WORKS *required to be done in certain alterations to No.* , *according to the drawings prepared by and under the superintendence of* Mr. B. FLETCHER, A.I.B.A., *Architect and Surveyor*, 24 *Bedford Square, W.C.*

FOUNDATIONS.

Excavate for the footings of walls of new scullery, w.c., &c., to the depth of one foot below present surface of back yard. If the nature of the ground be found to require it, dig out trenches for, and throw in a foundation of concrete; but prices for the digging and for the concrete, at per cube yard, are to be named in the estimate, at which these works can be executed, or omitted, as may be found requisite.

NEW BRICKWORK.

Cut perpendicular indents in the present back wall of house for reception of new work, and carry up the new wall on proper footings with sound square stock bricks and good mortar (one part lime to three of sand) in parallel courses, lining with the old work. Axed arches to all outside reveals. Brick up, as shown on plan, the present doorway into w.c. in yard. Provide also the new brickwork to doorways from landings of stairs into sculleries of first and second floors.

Damp Course and Iron Bond.—Two courses of slates in cement are to be laid throughout all new walls at level of ground, and a tier of hoop-iron bond, one layer to each half brick in thickness of the wall, is to be introduced at level of each floor, and once in height of ground floor.

Dustbin.—Form in half brick the new dustbin where and of the size shown.

NEW OPENINGS.

Cut out for and form the new doorways shown on basement plan, from front room into bedroom, also from front room into cupboard and lobby. Form also the new doorways shown from landings into new sculleries, and the opening for new window over the uppermost of these new doorways.

Present Work to be Removed.

The present erection of dustbin in yard. The partition dividing present w.c. from wash-house, together with the seat and appurtenances of w.c., so as to throw the space at present occupied by w.c. into the wash-house.

The sashes and frames, &c., to present staircase windows.

The present back door into yard, which is to be re-used in new position shown on drawing.

All materials taken down, and which cannot be re-used in the alterations, are to become the property of the contractor, and are to be allowed for in his estimate.

Basement.

New Doorways.—Put proper lintels over the openings before specified, to be made for the three new doorways, 4 inches thick, and 9 inches longer than width of opening; and line same and jambs with proper linings, which, together with the doors and architrave mouldings (if any), hinges, locks, and furniture, are to be of similar description to those of existing doorways on this floor. The two upper panels of present door from lobby into area are to be removed and ground glass substituted.

Partitions.—Form the closet shown in passage, by constructing across same two 2½-inch quarter partitions. Lath, plaster, and twice colour same, or otherwise finish to accord with the adjoining work.

W.C.—Form the w.c. where shown in area, with a 2½-inch quarter partition, covered externally with zinc, properly fixed and soldered, and internally lathed, plastered, and coloured. Form in this partition a 1¼-inch casement light, properly hung to ¾-inch rebated linings, with rounded nosing and architrave, bead and button fastening. Divide the w.c. from the scullery with a 1½-inch square framed partition, with door hung in same, with proper closet latch and bolt. Fit up the w.c. with proper 1¼-inch deal seat, riser, and hinged flap, white earthernware pan and trap, and apparatus and proper water supply from cistern over, 5-inch soil-pipe properly connected with drain.

Provide a floor in w.c. of 1¼-inch yellow flooring, on joists three inches by two inches.

Render, float, set, and colour the parts of brickwork forming walls of w.c.

Roof of W.C.—The roof of the w.c. is to be kept down in the manner shown in the small section on design 'C,' so as to admit of an upright sash being introduced between the roof and the underside of the stone entrance-landing, to light and ventilate the scullery. The roof of w.c. is to be flat, or with just sufficient fall to throw off the water, and is to be formed with joists 3½ inches by 2½ inches, with ¾-inch rough boarding to receive a layer of concrete. The upright sash is to be 1½-inch, glazed with ground or obscured glass, and hung on centres to proper rebated frame. Provide and fix lines, &c., for convenient opening and fastening of same.

Cistern.—Provide and fix over seat of w.c., the full width of same, 1 foot 6 inches wide and 1 foot 6 inches deep, 1½-inch deal cistern properly ploughed, tongued, dovetailed and strapped, and lined with 6-lb. milled lead. Lay on the water to same with ¾-inch supply-pipe, and proper ballcock and ball, and waste.

Meatsafe.—Form where shown in angle of lobby a meatsafe, at a height of 3 feet 6 inches from ground and on proper bearers, of 1¼-inch square framing with door hung, the panel of which is to be filled in with perforated zinc. Black japanned knob and button fastening. Fit up with two 1-inch deal shelves, on proper bearers.

Scullery and Sink.—Colour the brick walls shown in scullery.

Provide and fix where shown in scullery, on proper supports, a sink of galvanised iron. Provide with proper bell-trap and grate, connected with drain by a 3-inch zinc wastepipe.

Lay on the water from cisterns on flat with ¾-inch service-pipe, and brass bibcock.

Dustcloset.—Enclose under sink with 1¼-inch square framing, wrought on one side only, to form dustcloset. Hang a door to same with proper knob and button fastening. Provide two boards to keep the dust in, sliding in perpendicular rebated fillets fixed on each side of the interior of the door.

Ground Floor.

New Copper.—Provide and set in brickwork where shown, a new copper of similar description and size to the present one.

Iron Grating.—Over area of basement-window provide and fix an iron grating to prevent accident to persons stepping from back-door.

Doors.—In the new back doorway, the present back door is to be re-used, the present upper panels being taken out and replaced with ground glass, and all damage caused to linings, &c., of present back doorway is to be made good. The doors to scullery and w.c. are to be 1½-inch four-panel square doors, hung with proper butt hinges. The scullery door to have good iron rim lock and brass furniture, and the w.c. proper closet latch and bolt: 1¼-inch single rebated and rounded jamb linings.

Windows.—The new window in scullery is to have 1½-inch ovolo sashes, in deal cased frame, proper sunk sill, axle pulleys, good lines, and spring sash fastening, the upper sash only to be hung. Proper ¾-inch rounded jamb linings, and 1-inch rounded window-board.

The w.c. to have 1¼-inch casement light, hung to 1¼-inch rebated and rounded linings, and with black japanned button, and proper bolt.

Dustbin.—The cover to new dustbin to be of ¾-inch matched and beaded boarding, strongly ledged, with flap hung in same, with proper T hinges. A proper ledged sliding door with rebated fillets is to be fixed in front of dustbin for convenient removal of dust.

Stone Step.—If there be a stone step at present back door, same is to be re-used to new back door; if none, provide and fix a tooled York step, with proper holes cut for ends of door posts.

Sink.—Provide and fix where and of the size shown, proper galvanised iron sink, with hole cut and dished to receive brass bell-trap and 3-inch zinc wastepipe. Lay on water from cistern with ¾-inch service-pipe and brass bibcock.

Floor.—To be 1¼-inch yellow deal, on joists 5 inches by 2 inches, plates 4 inches by 3 inches.

Skirting.—To be of Roman cement, square, and 7 inches high.

W.C.—To be fitted with proper 1¼-inch deal seat, riser and hinged flap, white earthenware pan, D trap, and apparatus, 5-inch soil-pipe properly connected with drain, and with proper water supply from cistern over.

Roof of W.C.—To have ceiling joists 3 inches by 2 inches, lathed and plastered. Rafters 4 inches by 2 inches forming lean-to roof against party wall covered with ¾-inch rough boarding and rendered with cement.

Cistern.—Provide and fix over seat of W.C., the full width of closet, 1 foot 6 inches wide and 1 foot 6 inches deep, 1½-inch deal cistern properly ploughed, tongued, dovetailed and strapped, and lined with 6-lb. milled lead. Lay on the water to same from main with ¾-inch supply-pipe and proper ballcock and ball and waste.

Meatsafe.—Form where shown in angle of lobby a meatsafe, at a height of 3 feet 6 inches from ground and on proper bearers, of 1¼-inch square framing, with door hung, the panel of which is to be filled in with perforated zinc. Black japanned knob and button fastening. Fit up with two 1-inch deal shelves on proper bearers.

Coalbox and Closet.—Form where shown with 1½-inch square framing divided into two compartments in the height, the lower one 3 feet 6 inches high for coalbox, and the upper one fitted with two 1-inch deal shelves on proper bearers. Each division to have square framed door hung, with black japanned knobs and button fastenings. Provide the coalbox with two boards sliding in perpendicular rebated fillets on each side of interior of door to keep in the coals.

First and Second Floors.

Partitions.—To be 2-inch quarter partitions, dividing sculleries from W.C.s, and to be lathed and plastered both sides.

Floors and Skirtings.—To be similar to those described on ground floor, but to have joists 7 inches by 2½ inches.

Doors.—To be as described for ground floor, with exception of doors from stairs into sculleries, the upper panels of which are to be glazed with ground glass, and which are to be finished on the side next stairs in manner to accord with other doors on landing of the floor to which the sculleries respectively belong.

Alteration of Stairs.—If it be found that there is not a quarter space on stairs outside the new doorway into scullery, the stairs must be so altered as to give one, by forming two winders instead of one in the flight descending to the floor below.

Windows.—The present staircase windows are, if possible, to be re-used in the sculleries. If this be found impracticable, the scullery windows are to be as described for ground floor, as are also the windows in W.C.

W.C.s, Cisterns, and Sinks.—All to be as described to ground floor.

Dustshaft.—Form where shown in corner of W.C.s doors to dust-shaft, at a convenient height from floor, 14 inches wide and 18 inches high, hung to proper rebated frames and with black japanned knobs and button fastenings.

Coalboxes and Meatsafes.—To be as described for coalbox and closet on ground floor, but in the wall at back of upper division an opening is to be formed 9 inches square with proper rebated linings and filled in with perforated zinc.

Generally to House.

Roof over Sculleries.—The roof over new addition containing sculleries, &c., is to be a flat formed with joists 7 inches by 2½ inches, 1-inch rough boarding, and No. 12 zinc laid with proper rolls, and well turned up against and into brickwork. Provide and fix 3-inch iron rain-water-pipe and head from this flat, properly connected with same and drain.

The new brickwork is to be carried up to a height of 15 inches above level of flat, and finished with a coping of tooled Yorkstone, 12 inches by 3 inches, weathered and throated.

Cisterns.—The present cistern in front area is to be removed and re-fixed on this flat. Provide also adjacent to same a new cistern of similar description and capacity, and provide and fix all bearers and supports necessary to properly secure these cisterns. Lay on water to same from main with 1-inch lead supply-pipe with proper ball-cocks and balls and standing wastes, utilising as far as possible the apparatus now in present cistern.

Window over Flat.—In the space of back wall of house between the zinc flat and the ceiling of second floor, cut out for and form a window 3 feet high and 4 feet wide, with 1½-inch sash, hung on centres to proper rebated frame, and with proper lines, &c., for convenient opening and fastening of same.

Making Good.

All making good of work disturbed and damage occasioned by reason of these alterations, whether to carpentry, plastering, papering, painting, or otherwise, is to be properly performed, and all works are to be left clean and complete at the conclusion.

Painting.—Properly knot, prime, prepare and paint all new work usually painted, in four coats of good lead and oil colour, finishing in all cases so as to accord with the old work adjoining.

Plastering and Colouring, &c.—Lath, plaster, float, and set all new ceilings. Plaster, float, and set all new walls.

Whiten all new ceilings and soffits. Colour the walls of new sculleries.

Glazing.—Glaze all new lights not specified to be ground, with seconds Newcastle.

Papering.—Paper all new walls and partitions not specified to be coloured, and all parts damaged and disturbed by reason of these alterations, with paper similar to that of the old parts adjoining.

DESIGN 'C.'

SPECIFICATION OF WORKS, *additional to those described in foregoing Specification, necessary for the carrying out of the Additions and Alterations shown in Design 'C.'*

OLD WORK TO BE REMOVED.

Take down and remove the present erection of wash-house, except in so far as the existing walls may be re-used in the new addition containing bedroom. Take down and remove the present copper and brick setting of same.

NEW DOORS AND WINDOWS.

Cut out for and form the new openings from present into new bedroom on each floor, and fit with jamb linings, door and furniture, to accord in every respect with other door in present bedroom in each case respectively.

Cut out for and form the new narrow window openings as shown, to light staircase, and fit with sash windows and frames of similar character, and finish, as far as may be, in same manner as present staircase windows to be removed.

The new doors from stairs into sculleries are not, in this design, to have glazed panels, but are, in other respects, to be as specified for design 'B.' The windows for new bedrooms are to be similar to those specified for sculleries.

EXCAVATION.

In addition to the excavation specified for design 'B,' excavate

also for the addition of new bedroom on basement, to the depth of 1 foot below level of present basement floor.

Area.—Excavate also for the area shown outside new basement window, which area is to be formed of one-brickwork, coped with brick-on-edge, and rendered in cement.

New Brickwork for Additions of Bedrooms.

To be as described for sculleries.

Lintels.—Provide over all recesses shown in the walls lintels 4 inches thick to recesses not exceeding 4 feet in width, and 5 inches to those exceeding: the full width of brickwork over, and having a bearing of 4½ inches on pier at each end.

Floors and Skirtings of new additions for bedrooms to be as before specified for sculleries.

Roof over new Addition for Bedrooms.

To be a zinc flat, as described for roof over sculleries, and with similar rain-water pipe, &c.

DESIGN 'D.'

The works required for the carrying out of this design to be in every way similar to those last described for design 'C,' with the exception that the wall of scullery is not to be constructed with the splay therein shown, but a brick arch is to be turned in the position indicated by the dotted lines on the drawing, with proper abutment against present back wall. That portion of present back wall of house forming wall of staircase, being cut away to the height of 8 feet, from level of floor of new scullery in each case, a bressummer is to be introduced over each opening so formed, composed of two battens, blocked out to the thickness of brickwork over, and bolted together, and a story-post, 9 inches by 3 inches, is to be placed under the centre of same, to form division between, and receive the jamb linings of, the new door and window shown to be side by side.

Construct the angle partition forming back of coalboxes and safes with quartering 3 inches by 2 inches, lathed, plastered, and coloured, on the inside; and outside covered with ¾-inch rough boarding, and No. 10 zinc, properly fixed and soldered. Lath, plaster, and whiten the underside of roof of triangular space formed by this partition and back wall of house.

ADDENDUM K.

A separate price to be named in the tenders, if the following alterations are made from the works as described in the foregoing specifications.

Omit the separate cistern for each watercloset, and provide one large one, similar to that described to supply all closets. Alter all plumbers' closets, constructing bricklayers' closets instead, having proper wire pull and spindle valve, to supply same with water. The soil-pipe to be 4 inches instead of 5 inches lead.

CHAPTER VII.

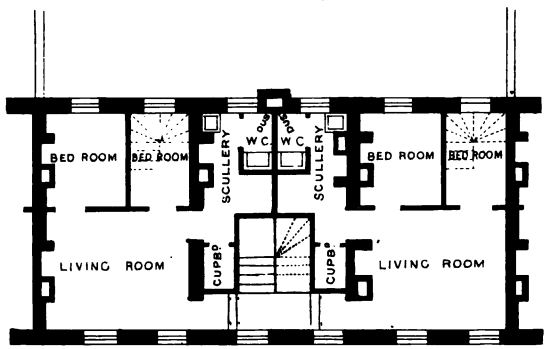
SUGGESTIONS FOR THE CONVERSION OF THREE NARROW-FRONTED TENEMENTS INTO TWO DOUBLE-FLAT HOMES YIELDING AN IMPROVED RENTAL.

In the preceding chapters I have been dealing with the adaptation of a good class of house (16 feet 8 frontages from centre of one party wall to centre of the other party wall), and have shown my four registered designs; and the cost and result will be dealt with in Chap. VIII. This chapter I propose to devote to the consideration of an inferior class of property altogether, namely, houses having a frontage of 12 feet only within walls.

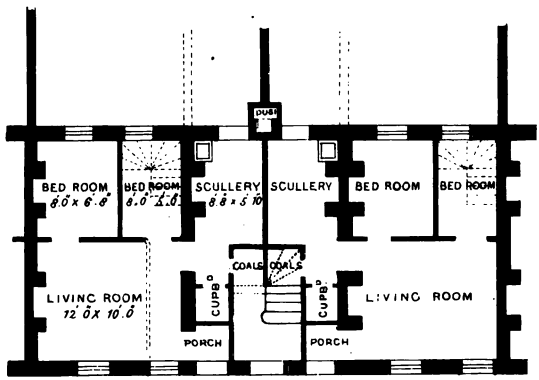
I may premise by saying I cannot give the builders' contracts to confirm what I shall advance, as my clients are not intending to alter this property at present.

In dealing with a street of this description, I would commence by doing away with each third house (see Plate 13), making such third house into scullery with kitchen range (having oven but not boiler), sink, &c. The front portion I devote to three lobby entrances, one for each of the ground floor flats and the third lobby for the two upstairs sets of flats, which are reached thence by stone staircase. The under part of this staircase is utilised for coal-closets and lobbies to

ELEVATION.



PLAN OF FIRST FLOOR.



PLAN OF GROUND FLOOR

SCALE 16 FEET TO ONE INCH *ALTERATIONS SHEWN IN RED*

REGISTERED JUNE 5TH 1871.

M & N. HANHART LITH

sculleries; all which is shown on the plan. The existing back parlour fireplace and chimneypiece remain for one scullery, and for the other scullery I build fireplace as shown. With regard to the present partitions on ground floor, that running from front to back of house at present dividing the front parlour from staircase I remove entirely, increasing thereby the width of front parlour 3 feet 1 inch, and doing away with the circular corner. The back parlour I do not touch except by removing doorway and door from A to B, so as to communicate direct with sitting-room. The present staircase I remove entirely and convert the space into a bedroom, 10 feet long and 5 feet wide. The present front door and frame I remove from C to D. I then put in C an ordinary window-frame and sashes, keeping the line of window-sill of adjoining window and making it to correspond in appearance with the window over it on first floor. The front door E is not touched, but serves as the new front entrance for the right-hand flat, the present door and frame of that set being used for the entrance door of the upper sets (F to G on plan), the opening F being treated like the opening C.

Further, the ground-floor rooms would retain the existing waterclosets in back gardens or yards, and the present defective water supply thereto from water-butts (which frequently won't hold water and want cleaning out, having no covers) would be superseded by water from cisterns which I place over cisterns on first floor, thus giving excellent force of water (so much

needed). I need not, I think, describe the first floor, because it is so very similar, and a reference to the plan which I have given of this floor will, I trust, fully explain it.

I believe this mode of dealing with existing houses would at once get rid of the wretchedly small back room on every floor of every house so altered, and I can scarcely conceive a greater advantage, nor would the reader if he had had my experience of such rooms. Some rooms like this, only 6 or 7 feet in their greatest width (being of course smaller where the chimneybreast with fireplace projects into the room) and 10 feet deep, I have seen occupied by a man, his wife, and four children, having to cook, wash, eat, drink, and sleep in that one room. Well may disease be propagated. Of course we are all aware that there is an Act to prevent overcrowding, but it is not, nor do I well see that it can be, efficiently enforced. At all events the old adage of prevention being better than cure is applicable. Prevent the rooms being so used by making them non-existent: this I propose. I would here digress, that I may not be misunderstood. I do not want to insist on three rooms or two rooms as absolutely necessary; because in my opinion we require houses of all descriptions, suited to single people; married people having no family (or no children living with them); married people with only very young children; married people with children of one sex only, female or male, living with them; and married people having both sons and daughters living with them. Now, necessarily, each of

these different classes of families requires different accommodation, or at least can put up with less and yet conform to all the requirements of health and decency. It is better for twice the number of people to live in two rooms than half the number in one room, because they get a change of atmosphere.

When altered we should have four sets comprising in each—

	Ft.	In.		Ft.	In.	
Living-room . .	12	0	×	10	0	(exclusive of bay-window)
Bedroom . .	8	0	×	6	8	
Bedroom . .	8	0	×	5	0	
Scullery . . .	8	8	×	5	10	

In addition there will be extra conveniences, as large closets at back of porch, and coal-cellar. For so much accommodation 5*s.* each might easily be obtained, and in the next chapter we shall have to consider the interest we shall obtain from the necessary outlay.

CHAPTER VIII.

EXPLANATORY OF THE COST OF BUILDINGS ACTUALLY ERECTED, AND COMPARISON WITH OTHER BUILDINGS—COST OF ADAPTATION OF EXISTING BUILDINGS TO THE DESIGNS DESCRIBED IN PRECEDING CHAPTERS.

I NOW have to consider the all-important question of cost, and shall show that one of the strongest recommendations to the adoption of my plans is, that by them new houses can be built and existing ones altered at a fair remunerative interest on the required outlay of money.

Clearly, if we leave philanthropy out of the calculation, and rest on commercial enterprise alone, we may be certain that no plans will be adopted by the commercial world which fail to show a good rate of interest on capital.

Firstly, let us take the cost per room of some of the existing model buildings, and we find—I quote from Mr. Roberts's 'Dwellings of the Labouring Classes' —that the cost per room of the Victoria Lodging House was nearly 60*l.*; the Columbia Square 106*l.* per room; Rochester Buildings over 96*l*; and Peabody Square over 113*l.*; while ordinary builders, working with the disadvantage of borrowed capital, build at a cost of 31*l.* per room. Here of course is one reason why

these block buildings do not pay, and why they declare dividends of such an uninviting amount as (I am still quoting from Mr. Roberts's work)—

	Per cent.
Metropolitan Association for Improving the Dwellings of the Industrial Classes	3½
Marylebone Association	2
Central London Dwellings Improvement Company . .	3
Strand Buildings Company	4½
London Labourers' Dwelling Society (Limited) . .	5
Improved Industrial Dwellings Company (Limited) . .	5
London Corporation Buildings . (estimated return) over	4

All then fail in the essential point of profit, as I do not find that any reserve fund is provided to recoup the capital, and the reader may be surprised to hear that my model buildings, while they are at least as good in plan and in the accommodation given, will pay a good rate of interest. Of this I cannot expect to convince him unless I can produce facts in confirmation.

Fortunately, unlike most propounders of something new, I can do this, and I will now show the outlay in building the model homes in Pentonville, which were built last year. My client determined to build one-half the block, for fear of non-success as to letting, and the total cost, including architect's fees, was 1,118*l.* By referring to the plans, sections, and perspective I have given, the reader will understand the half includes two of the bay windows shown and one entrance door, and comprises eight distinct homes; each having plumber's watercloset, sink (water laid on thereto), range, coal-cellar, and cupboards. The sizes of the rooms are also

marked on the plan. The present rentals are 7*s.* 6*d.* for the back sets, and 8*s.* 6*d.* for the front sets (those facing the street), thus giving a gross rental of 166*l.* 8*s.* per annum. I should mention the rental is put too low, but they were finished building at a depressed season, and the gardens could not be formed because a part of the land required was not vacated, and to prevent any risk of their not letting, the rent we considered fair value, namely, 10*s.* each set, was not asked. Moreover, we could not be sure that our novel plan would command approval. The result was that at the rentals of 7*s.* 6*d.* and 8*s.* 6*d.* the sets let before the building was finished, and dealing even with this low rental the result is—

	Per week £	s.	d.	Per year £	s.	d.
Eight sets: four at 7*s.* 6*d.* . .	1	10	0			
four at 8*s.* 6*d.* . .	1	14	0			
				= 166	8	0
Deductions:						
Apportioned ground-rent .	27	10	0			
Collection, 2½ per cent. .	4	3	0			
Rates and taxes . . .	28	0	0			
Repairs, say yearly . .	8	0	0			
				67	13	0
				£98	15	0

To return interest at the rate of 5 per cent. per annum, we require only 55*l.* 18*s.*, so we get more than 8½ per cent., as *that* sum would require only 95*l.* 0*s.*7*d.*, leaving a surplus 3*l.* 14*s.* 5*d.*; and yet I am confident my client could now obtain the larger rental I have mentioned, though I cannot help admiring the motive

that prevents him. This motive is the dislike he has to raising the rent of his tenantry.

We may therefore conclude that houses built according to my plan will safely pay even tempting interest, if land can be obtained on building lease at a price of 10*s.* per foot frontage. In inferior spots no doubt land could be obtained at a much less price, but then the dwellings would have to be let at a less rental, so that the revenue would not be greatly affected. We may therefore assume in ordinary cases, as I have shown, a certain income of over 7*l.* 10*s.* per cent. may be obtained from building according to my registered plan. I say that rate to allow the return of capital, and for parts standing empty, and not taking into account the increased rentals that may be obtained.*

* It may be objected the rental these homes command is far above that which the poorer classes can pay; to which I answer, I am, it must be borne in mind, building so that I can get tempting interest, and therefore I am bound as to rentals by the 'demand' to provide the 'supply,' to use the commercial phrase. It is certainly, in a monetary point of view, wiser to work from the higher demand to the lower, than the reverse; because we are more certain to get the rental paid by the higher class of the working men than the lower, and there is also the less destruction of the houses to be placed on the credit side of the question. I would make an extract from a letter in the 'Society of Arts Journal' of April 21, 1871, signed R. H. which confirms my view. He says: 'There is one more practical point which I would urge in connection with building. If there be a real want for houses for a class well above poverty, which it cannot itself supply, but for which there is no reasonable doubt it could pay in the shape of remunerative rents, there are surely some strong reasons for entering upon such an undertaking rather than directly building for a pauperised class, who cannot pay at all. It is certainly somewhat hard entirely to reverse the old maxim, and to refuse "on principle" to help those who can do a great deal to help themselves, and beyond this lie two very practical considerations: 1. This better class certainly cannot occupy new houses without vacating old ones, so that all, down to the lowest, are likely indirectly to share in the

Next, let us consider my second plan, adapted to land having little depth, and to families requiring only one bedroom, or whose means are more limited and who might make the sitting-room useful at night by having a shut-up or press bedstead therein.

As the basis of all calculation must be the ground-rent that is paid, or the interest on the capital invested in the purchase of the freehold land, we must first deal with that. I ever advise the purchase of land well placed, and so will assume we give 1,000*l.* an acre for four acres. Our first operation (for I place against us all question of using the roads on the estate, and presume our land is good, but has not any frontages) must be to reduce our four acres available for building by roads 40 feet in width. This will be an excellent width for the roads, having regard to the small height of our houses, which are 23 feet from line of pavement to top of parapet. The limit, I may mention, as to height permitted by the Metropolitan Buildings Act, 1855, would allow, with this width of roadway, an increased height of 17 feet, but I consider it wiser not to increase the height, as my desire is *improvement.* Next take the land, minus the road, and give a depth of 10 feet to the houses for back yards, on which no erections need be put, and put a ground-rent of 4*s.* per

benefit. 2. Such a better class of tenants will not only be self-supporting, but, in all probability, their houses, when tenanted, will become saleable, so that a great and permanent advantage would be afforded by a use of funds for a short time. Not only is the money replaced for future usefulness, but there is a double, though partial, advantage speedily and safely accomplished, and it may well be, also, that in some cases good gained by such easy steps may, in the long run, go on faster and better than that accomplished *per saltum.*'

foot frontage, which will be considered extremely moderate for land of the value of 1,000*l.* an acre, and that will give 7*l.* 1*s.* ground-rent for each block building, or a ground-rent for each home of 1*l.* 15*s.* 3*d.* As on the four acres, after the deduction of roadways, we can build 95 such buildings, the ground-rent produced would be 669*l.* 15*s.* a year. Taking 4*l.* per cent. per annum on capital invested, viz., 4,000*l.*+ 2,000*l.* for making roads and sewers = 6,000*l.*, gives 240*l.* a year, and thus leaves a profit of 229*l.* 15s. This will show how great a margin there is in my figures, should they even be disputed.

We see, supposing we desired only 4*l.* per cent. interest on the ground-rent investment, we could let the land at a trifle over 2*s.* a foot frontage, or 3*l.* 10*s.* 6*d.* for each block building of four homes.

The cost of erection which a competent builder would contract for is 300*l.* the block, thus giving the cost at 38*l.* (nearly) per room, if the scullery and conveniences on each floor are not charged.

The result will show thus:—

	Per week £	s.	d.		Per year £	s.	d.
The two ground-floor sets, with private yard to each in rear . . each	0	4	3				
The two first-floor sets . . „	0	4	0				
	0	16	6	=	42	18	0
Ground-rent	7	1	0				
Rates and taxes	7	3	0				
Collection	1	1	6				
Empties and loss of rent . . .	2	3	0				
					17	8	6
Annual income . .					£25	9	6

Deduct further 1*l.* a set for repairs, and we get, after all deductions, 21*l.* 9*s.* 6*d.* for an outlay of 300*l.*, or an annual revenue from our four acres of 2,040*l.* 2*s.* 6*d.*, or more than 7*l.* per cent. per annum. If we only paid the lower ground-rent before mentioned we should get 8⅓ per cent. on the capital after every deduction, and the rentals, I am confident, I have placed on the sets are below what they would command if land were judiciously purchased at 1,000*l.* an acre. It will be seen however, that we could give 3,685*l.* per acre, *without at all increasing* our ground-rents.

We have next to consider plans F. (Plate 8) and F.F. (Plate 7), which are similar to the preceding houses, except as to the additional accommodation afforded by the balcony arrangement. The slight difference between F. and F.F. we need not take into account in this chapter, it being merely the projecting window, the slight cost of which would be repaid by the slight increase of rent. The cost, then, of F. (Plate 8) per block would be 350*l.*, or nearly 44*l.* per room (not charging for balcony or scullery).

	Per week £	s.	d.		Per year £	s.	d.
The rental of ground-floor sets at 5*s.* 3*d.* ea.	0	10	6				
„ first-floor sets at 5*s.* each	0	10	0				
	1	0	6	=	53	6	0
Ground-rent, at 4*s.* per foot frontage	7	4	0				
Rates and Taxes	9	0	0				
Collecting	1	7	0				
Repairs	4	0	0				
Empties and loss of rent	2	14	0				
					24	5	0
					£29	1	0

Thus we have a net yearly income of nearly 8*l.* 10*s.* per cent. on capital.

While so many derive large incomes, compared to capital outlaid, from existing houses, it is surely reasonable to suppose that I, who only improve thereon, should derive, at least, as large a rate of interest, and all my figures may be taken as the lowest income that could be derived where due caution was exercised. That my statement is not my own as to the incomes from weekly property, I quote from that popular daily paper, the 'Echo,' of May 15, 1871: 'There is no more profitable employment of capital as regards the remunerative interest, than that of houses paying weekly rents. The interest realised on some investments of this character is not easily credited by those who are not familiar with the subject. If bad debts are made, or unsatisfactory tenants admitted, there is much less difficulty and loss connected with this class of property than where the rent is payable quarterly. An agent calling punctually every week, if the neighbourhood is a good one, and trade prosperous, brings in a large return, varying from ten to thirty per cent.'

I trust I shall not weary with my figures, but I cannot avoid next considering the cost of the alterations to existing buildings. This serious question we will now deal with, and first we will take design 'A,' which comprises the smallest alteration I consider advisable to be permitted by Government, where more than one family reside in a house.

It will, of course, be the safest method to deal with

the figures which represent the actual amount my client had to pay, and not give estimates where I can give contracts. Still, to show that the lowest tender is taken at a price that will remunerate the builder, I append the whole of the tenders that were received:—

Design 'A' (Plate 9).

	As per specification	As per Addendum K
	£	£
Fairhall and Weeks	113	93
Waterson and Co.	108	98
Bridgman and Nuthall	97	88

It will, therefore, be necessary in order to obtain a return at 5*l.* per cent. on this outlay that an increased rental of 4*l.* 8*s.* should be obtained. As there are four distinct sets of apartments given by my plan, this would necessitate an average increase on the rental of each floor of 1*l.* 2*s.*, or less than 6*d.* a week; surely no very difficult matter to obtain, taking into consideration the greatly increased comfort and convenience of the apartments arranged on my plan, as compared with those already existing. It is but fair to suppose that the sets of rooms would bear a much greater increase of rent than 6*d.*, but by acting liberally, and asking no more, it is certain that a landlord would ensure always having his property well tenanted by people who would know well that similar accommodation at so reasonable a rate was exceedingly hard to be met with elsewhere. Consultation with parties well acquainted with the poorer classes fully confirms my view that 1*s.* a week would readily be paid (and con-

sidered cheap) by them for improvements such as those indicated by my plans.

We now come to design 'B,' and proceed in the same way to give the tenders as they were received:—

Design 'B' (Plate 10).

	As per specification	As per Addendum K
	£	£
Fairhall and Weeks	239	219
Waterson and Co.	166	156
Bridgman and Nuthall	163	154

In this case, therefore, it would be necessary to obtain an increased rental of 7*l.* 14*s.* to pay 5*l.* per cent. on the outlay, and this would give to each floor an additional charge of 1*l.* 18*s.* 6*d.* or only 9*d.* a week, and this when the living-rooms remain the same size as at present, and the additional convenience of a scullery and separate W.C. is still given to each floor, while the use of a wash-house fitted with two coppers is common to all.

Come we now to designs 'C' and 'D,' for which the tenders were as follows:—

Design 'C' (Plate 11).

	As per specification	As per Addendum K
	£	£
Fairhall and Weeks	357	337
Waterson and Co.	289	275
Bridgman and Nuthall	230	221

Design 'D' (Plate 12).

	As per specification	As per Addendum K
	£	£
Fairhall and Weeks	357	337
Waterson and Co.	299	289
Bridgman and Nuthall	238	229

We find the difference so slight that it will suffice for our purpose to assume in each case that it would be necessary the property should bear an increased rental of 11*l.* 5*s.* to pay the required minimum interest of 5*l.* per cent.; which rental divided, as before, among the four separate flats, gives 2*l.* 16*s.* 3*d.* or an additional weekly rent in each case of *thirteen-pence*, in return for which we offer an *entirely additional bedroom* in addition to all the advantages (with the sole exception of the common wash-house) given in design 'B.'

Enough has surely been said to convince the most sceptical that I made myself the champion of no vain chimerical idea, when I asserted the practicability of adapting existing buildings to the purpose of letting them out in separate flats, each combining in itself all the usual conveniences of a dwelling-house of the poorer class, and yet obtaining for the outlay a return such as should satisfy the most exacting. For be it well remembered that though the above increases on present rentals are such as show an interest on outlay of 5*l.* per cent., they are in no case such as the apartments might reasonably be expected to command,

provided that the property dealt with be judiciously selected as to locality.

In proceeding now to consider the return on outlay promised by the alteration I have explained in Chapter VII., viz., that by which I propose the conversion of three houses into two, I am hardly in a position to place the matter before the reader on the same substantial basis as the last, having no surveyors' estimates or builders' contracts upon which to base my calculations. We may, however, arrive at an almost equally certain result if, instead of calculating the amount of increased rent required to produce a certain rate of interest on a given outlay, we show the undoubted improvements in present rentals which may be produced by carrying out alterations based on this scheme.

Take for example three four-roomed houses of two storeys in height, letting, as such houses may fairly be calculated to do in most parts of London, at 6*s.* a week, producing consequently a total weekly rental of 18*s.* We do away entirely with the centre house, not in any way interfering with the party walls, but simply removing the internal partitions and staircase, and utilising the space so obtained in providing convenient sculleries, W.C.s, staircases, and lobby-entrances to the sets of apartments obtained in the other two houses, the only structural alteration in which will be the removal of the staircase in each, and the utilisation of the space occupied thereby as an additional bedroom. The outlay therefore would

obviously not be a large one; but with the outlay, as I before said, I do not propose to deal. The fact remains that we have to offer in exchange for the three houses letting at 18*s.* a week, four sets of apartments, having the living-room and one bedroom the same size on the first floor as in the present houses, and larger on the ground floor, an *additional* bedroom, and every possible convenience in the way of W.C.s, sculleries, dust and coalboxes, &c. Now I do not think anyone can accuse me of exaggeration when I say that each of these sets of apartments should readily command 5*s.* per week, so that we get out of our two houses 20*s.* a week as against 18*s.* produced by the existing three houses. Now this gives 5*l.* 4*s.* improved rental—surely a considerable one on this amount of property.

I have said I would not deal with the question of outlay, but just for example's sake, assuming the cost of the alteration reached 50*l.*, which, upon careful consideration, I must consider a liberal estimate, the above rental would yield a return of over ten per cent. Can anything better be required to induce capitalists to convert these wretched, narrow-fronted, small-roomed tenements into healthy homes, with every sanitary requirement and appliance for domestic comfort? 'Let it be proved,' said the Earl of Carlisle, in one of his eloquent and powerful speeches, 'that the act of doing good, in however unpretending and commonplace a manner, to large masses of the struggling and impoverished, would pay its own way, and ensure its

fair profit, and it would follow that benevolence, instead of being only an ethereal influence in the breasts of a few, fitful and confined in its operations, would become a settled, sober habit of the many; widening as it went, occasioning its own rebound, and adding all the calculations of prudence to all the impulses of generosity.'

CHAPTER IX.

SUGGESTIONS HOW THESE HOMES SHOULD BE FINISHED INTERNALLY—FIXTURES AND FITTINGS.

THIS chapter I intend to devote to the fixtures, and fittings, and finishings.

First, as to finishing our homes, I would say always plaster the walls and ceilings. I strongly object (though I do not think I do so more than the occupants, if I am correctly informed) to the method of finishing adopted in the Peabody and other buildings. Take first the opinion in report issued by the Society of Arts, as to this, in 1864. 'There has been adopted in the Columbia Square and Rochester Buildings, an expedient which is decided cheap, but which I fear is not likely to become popular. The internal walls are not plastered, but merely pointed neatly, and tinted with a warm distemper colour.'

And again, speaking of lining the walls with glazed bricks or tiles: 'It has been proposed to line the internal walls with glazed bricks or tiles, but no method has yet been found for preparing and adapting them cheaply enough for the dwellings of the poor, and it is indeed questionable whether the plan, if practicable, would be acceptable.' Since then no

doubt experience has most fully confirmed the necessity for having a pleasing wall-surface—and this is certainly only to be obtained by paper of a cheap but effective pattern—and as I try to strengthen my statements as much as my space will permit, let me here quote Mr. Roberts, F.S.A., who says: 'The plastering to the walls of the living-rooms in cottages, has in some cases been omitted, but with very little saving of expense, as the brickwork requires additional care; and there is certainly a diminished appearance of comfort.'

We, then, plaster all our rooms except the scullery, and colour the walls of the bedrooms, or paper them. I prefer paper, and have used it in my buildings for the bedrooms. It can be obtained now very cheaply, and is cheerful, while the coloured walls are very objectionable, the colour rubbing off. The sitting-room I would always paper, and use a bright light paper, to make that room as cheerful as possible. So little is this considered that I am informed in some of the model buildings, the tenants are prohibited from knocking a nail in the walls for the purpose of hanging up a picture. The floors should be certainly wood except in the scullery, where I would have a cement floor, or part wood and part cement. Of other kinds of flooring, there are the ordinary brick floor, the hollow brick floors (recommended by Mr. Roberts), the lime and sand floors, the stone floor, the cement floor, or the asphalte floor, but they are all objectionable, and for the sitting-room and bedroom

nothing but wooden floors will do, whether we have a fireproof floor under, or the ordinary flooring joists. In confirmation, I might quote once again from the report issued by the Society of Arts as follows: 'This building' (speaking of model dwellings, New-Street Mews) 'was the first erected in the metropolis on Fox and Barrett's fireproof principle, with iron girders, and concrete and cement floors. In the bedrooms wooden floors have been since laid down, because the cement was cold to the feet.'

The skirting round the living-room and bedrooms may be yellow deal, but if any in scullery it should be cement.

No mouldings of any kind are used; all the doors to rooms and doors to cupboards I have square framed; no chamfers or mouldings, they add to the expense, are not necessary for comfort, and I find are not appreciated. The only exception I make is the front door, which I make moulded and bead butt and square inside.

No cornices in the rooms or passages. To room doors the fastenings I put are the usual 6-inch rim locks of the strongest make; to the waterclosets, back doors, and doors leading to balconies or yards, ordinary thumb latches, and 4-inch or 6-inch bolts. And for the lifting sashes I use sash fasteners and iron weights.

To meatsafe and coalbox, a turnbuckle and knob. The whole of the paintwork inside I have finished stone colour (four oils), so that it may be washed and kept clean.

The sinks I use are the galvanised iron ones.

The 'coppers' are galvanised iron pots.

The next items are very important, viz., the stoves and ranges. In each sitting-room I put a range having oven only: I do not put a range having a boiler; it is a perpetual source of annoyance and expense; at least, such is my experience; the tap leaks or the regulating ball does not act, and so the boiler bursts or cracks. Again, in winter, accidents are likely to occur from want of water, for sometimes, with all the care to prevent it, the pipes will get frozen. The cost of these ranges, I may mention, is 17*s.* 6*d.* for the size I use; I had them from Messrs. H. L. Taylor and Company, Queen Street, Cheapside, and they answer very well; but where a range cannot be afforded, there is a grate which, while it is the cheapest made, is decidedly superior to all others for the living-rooms where cooking is required to be done, and also a fire kept up at a small expense. I allude to the 'Pantheon stove;' its shape, circular at the bottom, enables a fire to be kept in at a trifling expense, and I have often had taken out, to oblige this class of tenant, elliptic and register stoves of all kinds, to replace them with this good old-fashioned and inexpensive stove; and I may here mention that I found in conversation with Mr. William Freeman, the curator of the Economic Museum, that his experiments and experience led him conclusively to the same result. The last items I need mention are the bells to front door. I have a separate 'pull' for each 'house,' in the doorpost, and have designed a

bronze plate with a hinged piece in its thickness, so that the agent, by undoing a small brass padlock, can insert beneath the bell-pull, a small tablet with the name of the tenant either written with ordinary ink, or painted thereon. The bells I place on the landing, just above the door of the set to which they belong.

I put a knocker on the door, I may say, not for use so much as that the door may not look different from those of the houses adjoining.

One thing must be borne in mind: all fixtures and fittings should be simple in construction, strong, and durable.

CHAPTER X.

COURTS AND ALLEYS, AND HOW TO IMPROVE THEM.

I FEEL I must devote only a short chapter to the very important question of the improvement of the courts and alleys of London and all large towns. I say short because I feel I am scarcely keeping faith with the intention expressed in my preface to make this work small, though, of necessity, properly to consider this subject, I must have added many plans and sections and much written description, and thus I should have lost the opportunity of enabling my publishers to issue the book at such a price as to place it within the reach of the general public. For I feel it is of the highest consequence to have the attention arrested of the middle classes, as they are large holders of the property this work is intended to improve, and if I can show to them that the improvement 'can be made to pay,' to use the expressive commercial phrase; I shall indeed have done 'the State some service.'

First let me mention, I am, in dealing with courts and alleys, adverse to any one system. Each court or alley must be treated by itself: all adaptation must have direct reference to the SPOT and the CLASS OF TENANT; and therefore, the first step is to carefully inspect the

court or alley and the houses adjacent. The owner of such property, though he may even have collected his rentals therefrom for years, might not have the slightest idea how it could be improved, while the professional man accustomed to deal with such matters, would in a short time indicate how vast improvements might be made at little cost. But there must be an absolute abandonment of all theories and dicta. For instance, while I am writing I read, in the 'Journal of the Society of Arts,' May 5, 1871, a letter from a gentleman who I believe has much studied the subject: I allude to Mr. Robert Rawlinson. He says:—

'With respect to workmen's dwellings, there should be independence. Internal cube-space, no room less than nine feet in height. *There must be three bedrooms, separately lighted, with means of thorough ventilation*, and also fixed means for ventilation at the junction of side wall and ceiling, by a long slit-like opening, and not in a square or block-shaped opening of any kind.'

In other respects his letter is excellent; for instance, what could be better than the following?—

'But the more any working man makes his own house his home, the better for himself, for his family, and for the whole community. "No place like home" cannot be too fully appreciated. Home must, however, afford shelter, isolation, comfort, and health, to be home—having no other place like it. A people without homes is a people unstable, disloyal, and dangerous; a people with homes will be healthy, peaceable, and

loyal. No nation nor State can attain to safety until the masses of the people have homes suitable for men, women, and children to live in who are to be taught the pure doctrines of Christianity.'

And it is because gentlemen so devoted to the subject and so sincerely anxious to help to benefit the poor, and who have consequently become somewhat of 'authorities,' are ever stating certain almost unattainable bases of action, that I am desirous of pointing out to them, that it is, in some measure, by their over-earnestness and their desire to have nothing but that which they consider perfect, that the mass of those who would do something are estopped from progress. For instance, the proprietor, having read this letter, goes to his property with rule or tape in hand to measure the height: the result no doubt is that the rooms are not 9 feet high (I estimate that certainly three-fourths of the rooms occupied by working men are less). He ponders over this. Nothing can be done but pull down and rebuild, and yet his house may have thorough ventilation and large open space behind. He may consult his architect, who will point out that the Metropolitan Buildings Act, not a very antique statute (passed only in 1855), gives 7 feet as the minimum height, except top storeys, in which it only requires an average height of 3 feet 6 inches for any house; and he may go on to point out that surely 7 feet will suffice, that if he pulls down and rebuilds each storey 9 feet high the expense will be so heavy that he cannot estimate it will repay, and that he

cannot recommend him to do that, but be content with something less ambitious and more practical. But his client goes away and says, 'Well, if I can't do it properly I had better leave it alone;' and so this seems to be the effect on the general public by the labours of the various societies. They have not induced the public to go heartily with them, but have *frightened* them. As Professor Kerr says, in speaking of what they have done in 25 years—

'Take all the model lodging-houses throughout London erected within the last 25 years, and they are only a mere drop in the bucket compared with the ordinary progress of population; and what room, therefore, can they have made for anything?' Yes, rest assured, reader, two things are urgent now; as, whether or not the past 25 years have advanced us as much as they might have done had the societies been less ambitious in striving only how to do *perfect work*, it is only desirable to discuss the matter now with the view of deciding *what shall now be done*; and those two things are, first to adapt all the good houses now occupied in parts by different families into flats (and I have shown how this can be done profitably); the second, the adaptation of houses in courts and alleys to make them more fit for occupation, while limiting the outlay so as to enable them still to be let at about the same rents as they now let for; and we can safely approach this with the pleasing certainty that we are doing much more good by improving than by demolishing, which so many advocate, as demolition simply means the

overcrowding of adjacent property or ruining the ejected families. The houses in many courts and alleys are built back to back, and it is therefore impossible to get direct ventilation from back to front; but I have dealt very successfully with this class of property, and the officers of health have approved the alterations. Over the door of each room that leads on to staircase I have inserted a frame filled with perforated zinc; above the staircase I have placed in the roof as large a skylight as the space would admit, raising it well above the roof, and round the sides and bottom putting louver boarding, so that at all times I get ventilation; and where it is desirable I put perforated zinc in fanlight of entrance doorway, so that night and day there is an imperceptible current of air, and yet so out of sight and so devoid of draught is it that the tenants do not stop up the openings, as I have so frequently seen done with other modes.

Another improvement is the building or converting a shed, if space is too limited; fixing therein three or four coppers; placing this new wash-house under the care of the agent for the letting of the houses, if she or he resides on the property; allotting each copper to so many tenants, and naming a day for its use by each. This they have told me they considered a great boon. 'Best thing you have done for us, sir,' they have said. I treat the roof of this wash-house the same as roof over staircase, with skylight and louver boarding. Again, where the court is very narrow I have removed one house; this gives more air-space in the

court or alley and enables one to get cross-ventilation and space for extra dust receptacles and waterclosets, which are in most cases absolutely required. Where it is possible I always provide a watercloset for each tenant, giving him a key thereto so that he may always keep it locked, considering it economy in the end to do this, as it prevents the continual expense of unstopping the drains. Another advantage is that it reduces the number of tenants who use the court or alley as a playground for their children, giving the remainder more space and air, a matter of great consequence.

Again, where the two upper storeys are *very low* in height, one forming the attic or garret, I would recommend a rather violent remedy, namely, doing away with intermediate floor and making it into one storey.

Again, in some instances I have only had to make a communication between the front and back rooms to increase ventilation. Of course, in all cases where the top sashes do not open they must be made to do so.

Another improvement I may mention. Where there are steps up to the ground-floor storey from pavement, and a deficiency of height in this storey, lower the floor so as only to leave the doorstep raised above pavement, excavating the ground and putting sound joists, sleepers, and sleeper-wall, with ventilation thereunto; but where the ground floor is raised above pavement, it is usual to find a basement under. If this is occupied it is generally wise to get rid of the tenants

and utilise the basement for other purposes, as, for instance, for general or separate wash-houses, or children's playground. I would mention that I have been concerned in the case of another court condemned by a local Board of Works (I purposely omit mentioning which Board), where, acting under my advice, my client appealed from the decision. Though I submitted a plan for the alterations, which comprised utilising a piece of ground they did not know of, by removing a wall and shed and so giving every house a separate watercloset with key, and a general wash-house fitted with coppers, the Board decided no alteration should be made, but the houses be demolished. At the hearing of the appeal, however, the Bench agreed to my plan, and retained it as a record for the Court as to the alterations that should be carried out, and I presume I may fairly claim the victory, as the Vestry had to pay their own costs.

I mention this case because the Vestry and local Board may have been actuated by ideas and dicta which seem to pass current as if they were not to be questioned. Dr. Guy in the witness-box, giving his evidence, stated it was absolutely necessary in all rooms, to render them fit for habitation, to have direct through ventilation in a horizontal direction, and yet, as a fact, there is scarcely a house in town (or country either) that complies with this requirement. I contended, if air came in either at the double hung sash windows or by ventilators, and I removed the vitiated air by a skylight, as I have previously described, with louver boarding,

or by carrying up a dormer from roof, and placing therein a large sash hung on centres to open, this was amply sufficient. I should mention the ground-floor and first-floor rooms communicated directly one with the other by an open staircase, so they were virtually one room divided in part vertically; the ground-floor room having the window I have mentioned and the street door, the first-floor room a similar window. As the learned doctor might not have understood plans and sections, I caused two of the houses to be altered as I proposed, but with no result on his opinions, which were, let me repeat, that no room was fit for the poor without direct through horizontal ventilation; that the confinement to which the prisoners at Millbank were subjected, did not make it necessary to provide more cube space for them than the poor required, and that that quantity must be, for each adult, 800 cubic feet. Thus a room 14 feet by 12 feet and 8 feet high, a room of no mean size, would only accommodate one person, as it only gives 1,344 cubic feet, while according to this authority 1,600 cubic feet should be given. Surely it would be wiser to adopt a more moderate view of these requirements, so that we may begin practically to benefit the dwellings of all large towns instead of following the present theoretical plan, which, setting up so exalted a scale, seems absolutely to prevent anything being done.

It may be objected, 'But you get rid of some tenants.' I answer, 'Yes; but to how small an extent compared with the number I should deal with!' I believe in the

entire alterations I should not dislodge nearly so many as a new Metropolitan Railway, which would be sure to be sanctioned by the Houses of Parliament, if only a company could be found who considered it would pay. I strongly urge the reader to consider carefully what I have advanced, as here may be found great scope for philanthropy, for all other classes of buildings may be left to the commercial world, as they will pay fair interest if properly purchased, built, and managed; but there are some courts where the alterations I should like to carry out would not give a large enough interest to tempt those classes, and here seems to me the opportunity for aid to be judiciously given, either by lending a portion of the capital at 2½ per cent. or even without interest; one condition of its being so lent being that it be returned by fixed annual instalments extending over twenty-five or thirty years, if the property dealt with is freehold. This would enable those who undertook the improvement to obtain fair interest on the portion of capital they would find.

CHAPTER XI.

ADVANTAGES THAT WOULD ACCRUE FROM THE LEGISLATURE DEALING WITH THE SUBJECT—SKETCH OF THE ACT OF PARLIAMENT REQUIRED, GIVING THE LEADING PROVISIONS NECESSARY—NOVEL BASIS OF CALCULATION PROPOSED FOR VALUATION OF INTERESTS, TO OBVIATE LEGAL ACTIONS.

LET me now consider the question of the improvement of the dwellings in towns in its more general aspect. In the preceding chapters we have considered the building of new homes, and the adaptation of existing houses so that they may be made into homes for the classes who now occupy them by the addition of those conveniences which are admittedly necessary, and those alone, so as by the smallness of the outlay to enable the altered buildings to be let at a low rental; and if the reader has followed me through the preceding chapters I believe he will think with me that my propositions, though they are somewhat novel, contain the elements of dealing practically and successfully with the greatest want of the day—I venture to use even so forcible an expression—at such an expense as shall induce capitalists and speculators to embark in these undertakings. I now crave his attention to the various points I consider should have the attention of Parliament and the country. First then let us consider who are the holders (lease or in fee) of these houses.

In my own experience of this class of properties, which during the last eighteen years has been very extensive, I find the great majority of such houses are held on lease by the classes who are industrious tradesmen and who have invested their savings therein, or by their widows and children, or by spinster ladies who derive their sole income from such property. In nearly all cases the holders of such houses are those, I may safely say, to whom present income is the all-important point, and who are averse therefore to incur outlay for improvements, because such a course would deprive them for some time of that which they cannot well do without. Now some of the public daily journals a short time since were very violent about the matter, and contended that all property should be confiscated and pulled down that did not come up to the sanitary standard of the present day; and thus, should their false views have prevailed, I know not how many thousands would have been quite ruined who certainly could hardly have anticipated when they or their parents purchased property (twenty years since, even), that an alteration in the opinions of medical men as to what was required would deprive them of their income.

We have then to consider the question in all its bearings, and in dealing with so vast a problem I would desire my observations only to be regarded as hints to be considered and improved upon. First—for after all that can be said for the 'invested rights' of freeholders and lessees they are not to be primarily considered—are the classes who cannot rent entire houses,

either from their requirements of space being limited, or their incomes. And here I would propose that a further amendment of the Metropolis Local Management Act be made, and amongst the clauses of such Act I would have :—

1. That before any lessee or occupier shall let out any part of his house separately, notice should have to be given to the authorities of such intention. And I cannot see that any hardship would be felt. It is simply extending the lodging-house system already at work, and I believe it is found to work well.

2. That the officer, having inspected and found all the requirements of the new Act complied with, would give a notice in writing that certain parts of the house (specifying them) might be let.

3. That no part shall be let off unless such part shall contain, or have attached, or within a convenient distance (or such distance and position might be described, giving the extreme limit), the following, for the sole use of such part intended to be let, namely, a water-closet, water supply, sink, having pipe to convey water therefrom into drains, meatsafe, coalbox or a place for coals, and that none of these shall be either in the living or bedroom.

4. As the present powers under the Act for removal of nuisances are, I conceive, quite sufficient for the purpose, I do not think any alteration or amendment necessary; but, to prevent any uncertainty, and to ensure the new Act working effectually, it would be as well to give rather more power of inspection.

5. I should like the power of punishing by fine any tenant who damaged any of the fittings and fixtures. No doubt this power exists to some extent, but I consider it would be wise to confirm and vary it, so as to bring this fully before the public.

6. As I propose compulsory powers, it would be necessary to give very extended time before such compulsory powers could be enforced in existing property, though of course it could apply at once to all *new* erections, so as not to confiscate property, which, I am sure, would not be permitted; but if this delay be objected to, I consider the clause should be framed in one of two ways, either delaying the enforcement of the Act for a certain number of years, which I do not at all like, or else giving the leaseholder the power, should the Local Board of Works or other authorities of the place in which the houses are situate require him to make the outlay necessary to comply with this intended Act, to require the freeholder to take the property off his hands; and hereafter I propose showing how this might be arranged as a simple calculation and survey, and how it could be done so as to do away entirely with the expensive compensation actions to which we have, with Railways and Boards of Works, so long been accustomed; and which surely are a disgrace to a nation considered so practical and businesslike by the world.

Now to explain how I propose to work the system set forth in preceding paragraph. I propose then that the POOR-RATING shall guide all compensations, and

that to prevent alteration in the basis I would have the value calculated at the poor-rating of all property as such rating stands at the date of the first reading of this intended Act, so preventing any increase of the rating on the one side or any reduction thereof by the authorities; and as the time for the vending to the authorities is limited, no hardship would be felt in this on either side. I would then insert a clause of so many years' purchase, taking the Government annuity tables for fixed periods as the basis, and from such amount deduct the sum of money that would be required to put the premises in repair in accordance with the covenants in the lease under which the property is held, or if in fee then to put them in good and tenantable repair. Here then is the only dispute that can occur, and to meet this I would insert the further clause requiring each to appoint a surveyor, and for the surveyors to appoint an umpire in the usual way; limiting the fees to be paid to the umpire to a fixed sum per room (large or small), and giving the umpire power in his discretion to say which of the parties shall pay the other's surveyor, or in what proportion, but in no case having power to award to any surveyor for his fees more than the fees he would himself be entitled to. Of course these clauses would be very stringent.

I think then I have shown a way of summarily dealing with those who receive the rack rent, and yet with perfect fairness; besides, they need not sell to the authorities unless they like, but may either keep the houses and carry out the works, or sell their property

in the open market. The next point would be the intermediate interests, which, though now much simpler than the former, I would try to make more certain and simple still, by having a table in the Act fixing the payment to them, according to the length of their existing interest, or the time when their reversionary interest accrued and its duration. The next difficulty would be the copyholders: I desire to meet every difficulty, and think I have mentioned now all the different classes of interests, and this I would meet by a clause requiring the calculation of what sum it would require to enfranchise and so make the houses freehold, and then proceed as for freehold property, deducting of course from the result the sum required for the enfranchisement.

You will see that by a fixed basis of calculation, namely, the poor rating, I avoid the present elaborate compensation actions in which we surveyors are so much engaged, and substitute a mode of proceeding preventing all actions, and the only reference is of the simplest kind, no voluminous evidence to be taken, but the two surveyors (one representing the vendor and one the parish or other authority) meet on the premises, go over them, and if they cannot agree, then the umpire (to be previously appointed) goes and views and decides. His decision is final, and this award is deducted from the amount to be paid to the vendor.

Let it be clearly understood I only offer these remarks as suggestions for consideration, but I think they contain the germ which could easily be elaborated into

such an Act as would at once remedy the acknowledged existing evils and yet give fair but moderate remuneration to invested rights.

One last difficulty let me deal with. It is, What are the authorities to do? for many will say 'they cannot manage house property profitably.' Well, where the authorities are averse to retain and manage the property, though I consider they could do so and thus yield to the ratepayers a percentage that would materially reduce the amount the tax-collector would 'call for,' I propose either that they shall expend the necessary sum to do the works required by the Act (by contracts obtained through public notices), and then when done sell the property by tender or sublease for a term of years, thus keeping a reversion for the future, as the improvement in land and property has really for centuries been increasing in value in England, notwithstanding now and then sudden depressions therein and panics, or the authorities might either let or sell at once, appending to the conditions of sale or lease a schedule of the works they required done.

One more word of advice on this part of my subject. Do not make any rules or regulations to guide or restrict the tenantry; let them do as they please, but let them know that if they misconduct themselves or destroy or injure the fixtures, fittings, or other things, or render themselves obnoxious to the majority of the other tenants they will have notice to quit and be required to leave. This is the only method ordinary landlords employ, and I believe it is all that is necessary

unless you have such masses of people congregated together as there are in the large so-called model lodging-houses. I know in those Model Homes I have erected, I have not heard one instance of injuring or destruction nor had one watercloset stopped even, but the tenants seem to thoroughly appreciate both the comforts provided for them, the confidence reposed in them, and their independence in the absence of all rules and regulations.

CHAPTER XII.

ADVICE TO INVESTORS INTENDING TO BUILD OR ADAPT—CONCLUDING REMARKS.

A FEW concluding remarks will be considered necessary, and I write them with reluctance, hesitating to launch my book into the troubled waters of public opinion, feeling that however much deep study and thought I may have devoted to this subject, I may not have expressed the matter in such language as first to engage the earnest attention of my reader, and having done that *to make him so thoroughly* comprehend the designs, plans and details, including outlays and costs, that he may, should I carry him thus far, be thoroughly master of what is really required, and of my projects to meet such wants. Deeply convinced as I am that this subject is of the highest and first importance, and admitted so to be (as I have by a few quotations shown) by all the leading men of the day, I have endeavoured herein to give at all events a safe, practical, and economical mode of meeting this acknowledged requirement, and one, also, by which the investors, while feeling they are helping forward a truly English work, will find that they are also realising a fair interest for their capital. But I would remind intending investors of a few pitfalls, for as any failure of realising a dividend

might probably condemn my plans, I am most naturally anxious to prevent such a catastrophe.

First, employ a professional man, one well versed in the locality in which it is intended to purchase the land or houses, or to rent them (this is more especially necessary in dealing with London property), one who has had to deal with land and houses, so that you may not pay too dearly for them, because it must be quite clear to my readers that building these homes or adapting existing houses to the purpose must ever be subject to the law which governs all investments, namely, that if we buy at a low price our dividend must be increased thereby.

Secondly, do not attempt to purchase or rent premises yourself without such advice, and do not let the vendor know the object for which you require them. Remember what Mr. H. Roberts says in his essay 'On the Improvement of the Dwellings of the Working Classes' on this point:—

'The fact of property being enquired after by philanthropic persons, gives to it a fictitious value, and in numerous instances the object has thus been defeated, or the price paid for the property has been so high, that with the outlay for repairs, its net return is such as to discourage any further attempts of the same kind.'

But let your professional man go into the open market as any other buyer, and buy at the Auction Mart or elsewhere. If it be land, then only buy such land as would command tenants at profitable rents if the ordinary speculative builder ran up his *one-plan* houses. If houses for conversion, then only such as are producing

a fair return on what is proposed to be given for them; or if not producing rent, being shut up by authority under the new Act of Parliament, or too dilapidated to let, then he must carefully go into the question; and here his decision and calculations are most important, and naturally lie at the root of success. All I advance and consider I have proved is, first, that on the same *land* I can build my Homes to yield a larger profit than the speculative builders' houses do; secondly, that I can adapt existing buildings, and the outlay shall make a better return than is produced by them at present.

Thirdly, when you have purchased or rented the land or houses, have plans carefully prepared by an architect, as in many cases the plans will require varying to adapt them to the peculiarities of the land or the houses, so as to take the best advantage of them.

Fourthly, have the work done according to the architect's specification by contract. Let the architect invite tenders from three or four *well-known builders*; by this means you will know the cost, and you will get your buildings *done well*—a most important consideration both for the health and comfort of the tenants and to secure the proper return on capital invested.

I now commend my work to the public, and shall feel much obliged for any suggestions that may be offered, to which I will refer if I again employ my pen on this subject.

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